

APPROVED AND ADOPTED

Clarksburg Master Plan & Hyattstown Special Study Area

TECHNICAL APPENDIX

June 1994

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Montgomery County Department of Park and Planning
8787 Georgia Avenue
Silver Spring, MD 20910-3760

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Abstract

Title	Technical Appendix, Approved and Adopted Clarksburg Master Plan and Hyattstown Special Study Area
Author	The Maryland-National Capital Park and Planning Commission
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Abstract	This document contains maps and supporting background data to support the Land Use, Transportation, Environmental, and Implementation chapters of the Approved and Adopted <i>Clarksburg Master Plan and Hyattstown Special Study Area</i> . It also includes the Resolutions of Approval and Adoption.

The Maryland-National Capital Park & Planning Commission

The Maryland-National Capital Park and Planning Commission is a bi-county agency created by the General Assembly of Maryland in 1927. The Commission's geographic authority extends to the great majority of Montgomery and Prince George's Counties; the Maryland-Washington Regional District (M-NCPPC planning jurisdiction) comprises 1,001 square miles, while the Metropolitan District (parks) comprises 919 square miles, in the two Counties.

The Commission has three major functions:

- (1) The preparation, adoption, and, from time to time, amendment or extension of the General Plan for the physical development of the Maryland-Washington Regional District;
- (2) The acquisition, development, operation, and maintenance of a public park system; and
- (3) In Prince George's County only, the operation of the entire County public recreation program.

The Commission operates in each county through a Planning Board appointed by and responsible to the county government. All local plans, recommendations on zoning amendments, administration of subdivision regulations, and general administration of parks are responsibilities of the Planning Boards.

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The listing of the names of members of the Advisory Committee does not indicate approval or disapproval of this document by any committee member. It is the Planning Board's policy that Advisory Committees not vote on issues. The members advise the Montgomery County Planning Board regarding the problems, needs and views of the groups or areas they represent. These views will be considered by the Planning Board in its deliberations regarding the Master Plan.

* Replaced Martha Brown

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Note:

- * The technical studies are organized in accord with the chapters of the Approved and Adopted Plan.

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Introduction

Clarksburg Master Plan Process

The public participation elements that have been part of this process are worth noting. The Planning Board has received valuable input as a result of the numerous meetings and workshops.

Focus Groups

The preparation of this Plan began in March 1988 with the Clarksburg Focus Groups and Town Meetings. These meetings brought together local residents and development interests to discuss their concerns and aspirations for the Study Area's future. The widely varying views on jobs, housing, and environmental protection are outlined in Outputs from the Clarksburg Focus Groups.

Issues Report

The Issues Report, published in August 1989, identified the scope of the issues that would need to be addressed during preparation of the Plan. The nine general categories identified were:

1. Community Character.
2. Mix and Type of Employment Uses.
3. Retail Services.
4. Balance of Housing and Employment.
5. Mix of Housing Types.
6. Transportation and Transit Serviceability.

7. Environmental Opportunities and Limitations.
8. Historic Preservation.
9. Specific Site Opportunities.

The Clarksburg Master Plan focuses on these issues and others that became apparent through greater analysis, and recommends strategies for achieving the relevant goals and objectives.

Clarksburg Master Plan Citizens Advisory Committee

The Clarksburg Master Plan Citizens Advisory Committee (CAC) was selected by the Planning Board and began meeting in November 1989 to advise the staff during the preparation of this Plan. This advice took many forms. Overall, the CAC and staff met over 35 times in public meetings. The CAC members are listed in the beginning of the Plan.

Clarksburg Tomorrow Symposium

As part of the effort to improve public participation and understanding of the challenges faced in creating a new town, a number of community workshops were held in addition to the numerous CAC meetings. The Clarksburg Tomorrow Symposium was held in January 1990 to:

Enable a panel of experts to address critical issues relevant to Clarksburg's development.

Foster interaction on these issues between the panelists and those in the public and private sector who will be involved in the Clarksburg Master Plan.

Inform participants in the Symposium about emerging concepts from other areas in the U.S. and abroad.

Approximately 125 people attended the Symposium, including representatives of the CAC, the Clarksburg Civic Association, area residents, developers, land use lawyers, staff members of the Montgomery County Planning Department and County Executive. Montgomery County Council and Planning Board members were also in attendance.

The Symposium concluded that the challenge for all concerned with Clarksburg's development is to produce a plan that:

Concentrates development in rural and urban centers.

Manages the land use pattern in a way that protects the natural environment.

Provides a transit network with a transit serviceable land use pattern.

Recommends mechanisms for the funding of needed infrastructure.

The Plan's recommendations follow the guidance stated above and go beyond these to achieve an appropriate balance between a host of competing objectives.

Property Owner Workshops

The staff and CAC invited the owners of large tracts of property in the Study Area to present their goals for the development of their properties at two Property Owners Workshops. The CAC, staff, and general public received information from property owners who control approximately 6,500 acres (65 percent) in the Study Area. This percentage rises to 74 percent when parklands are excluded from the total acreage.

A key goal of the workshops was to have the people who know the most about a particular piece of land (the owners) share their knowledge, hopes, and concerns with those who would be involved in recommending changes to their land (CAC and staff).

Alternatives Workshop

In May of 1990, the staff presented three possible land use scenarios at a public Alternatives Workshop. This Workshop, and the CAC meetings which followed it, provided opportunities to discuss the merits and shortcomings of each of the scenarios.

Options Workshop

Staff held a public Options Workshop in February 1991 to present three land use options for the Study Area. This workshop was to receive public input to guide the subsequent revisions that would take place in the preparation of this Plan. Approximately 100 people attended and a wide range of opinions were expressed, both in favor and against the options.

Staff Draft Plan

The Staff Draft Plan was published in October 1991. It contained the recommended land use scenarios for the Clarksburg Study Area.

Preliminary Draft Plan

The Preliminary Draft Plan was published in February 1992. It was the same document as the Staff Draft Plan with selected clarifications to the text. It was the subject of public hearings on March 23 and April 2, 1992, and 15 Planning Board worksessions.

Planning Board (Final) Draft Plan

The Planning Board (Final) Draft Plan was published in June 1993. Public hearings were held by the County Council in September 1993 to solicit comments on the Plan. The County Council then conducted public worksessions with the Planning Board and staff on the Plan. The worksession topics and dates are shown in Table 1.

Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area Worksession

Table 1

Work-session	Date	Topic
PHED Committee		
1	October 4, 1993	General Discussion Existing Structure and Infrastructure Environmental Issues Fiscal Impact Analysis Staging
2	October 18, 1993	Background on Transit Development along the I-270 Corridor Historic Preservation
3	November 8, 1993	Signature Sites along I-270 Town Center District
4	November 29, 1993	Town Center District Transit Corridor District Brink Road Transition Area Ridge Road Transition Area Newcut Road Neighborhood
5	December 6, 1993	Ten Mile Creek Area Cabin Branch Neighborhood
6	December 13, 1993	Tregoning-Piedmont Property (Ridge Road Transition Area) Hyattstown Special Study Area
7	January 31, 1994	Transportation Issues
8	February 1, 1994	Signature Sites in Town Center Ten Mile Creek Area
9	February 7, 1994	Ten Mile Creek Area Cabin Branch Neighborhood
10	February 14, 1994	Transportation Issues
11	February 22, 1994	Tregoning-Piedmont Property (Ridge Road Transition Area) General Environmental Issues Cabin Branch Neighborhood Site 30 (Ten Mile Creek Area)
12	February 28, 1994	Hyattstown Special Study Area

Table 1 (Cont'd.)

Planning Board (Final) Draft Worksession (cont.)**Table 1**

Work-session	Date	Topic
13	March 11, 1994	Hyattstown Special Study Area Signature Site Analysis
14	March 14, 1994	Signature Site Analysis Residential Portions of Ten Mile Creek West of I-270
15	March 25, 1994	Biological Criteria Impervious Surface Caps Tregoning-Piedmont Property (Ridge Road Transition Area) Reid Farm (Cabin Branch Neighborhood) Residential Portion of Ten Mile Creek West of I-270 Zoning Transferable Development Rights Alignment of M-83 Cumulative Results of PHED Committee Recommendations
16	April 21, 1994	Staging
17	April 22, 1994	Staging
County Council		
1	April 5, 1994	Overview of PHED changes Transportation
2	April 11, 1994	Land Use
3	April 12, 1994	Land Use
4	April 14, 1994	Land Use Historic Preservation
5	April 15, 1994	Signature Site in Town Center MPDUs Environmental Issues Zoning and Text Amendments TDRs Transportation
6	April 19, 1994	Transportation
7	April 26, 1994	Public Facilities Staging

Development Profile

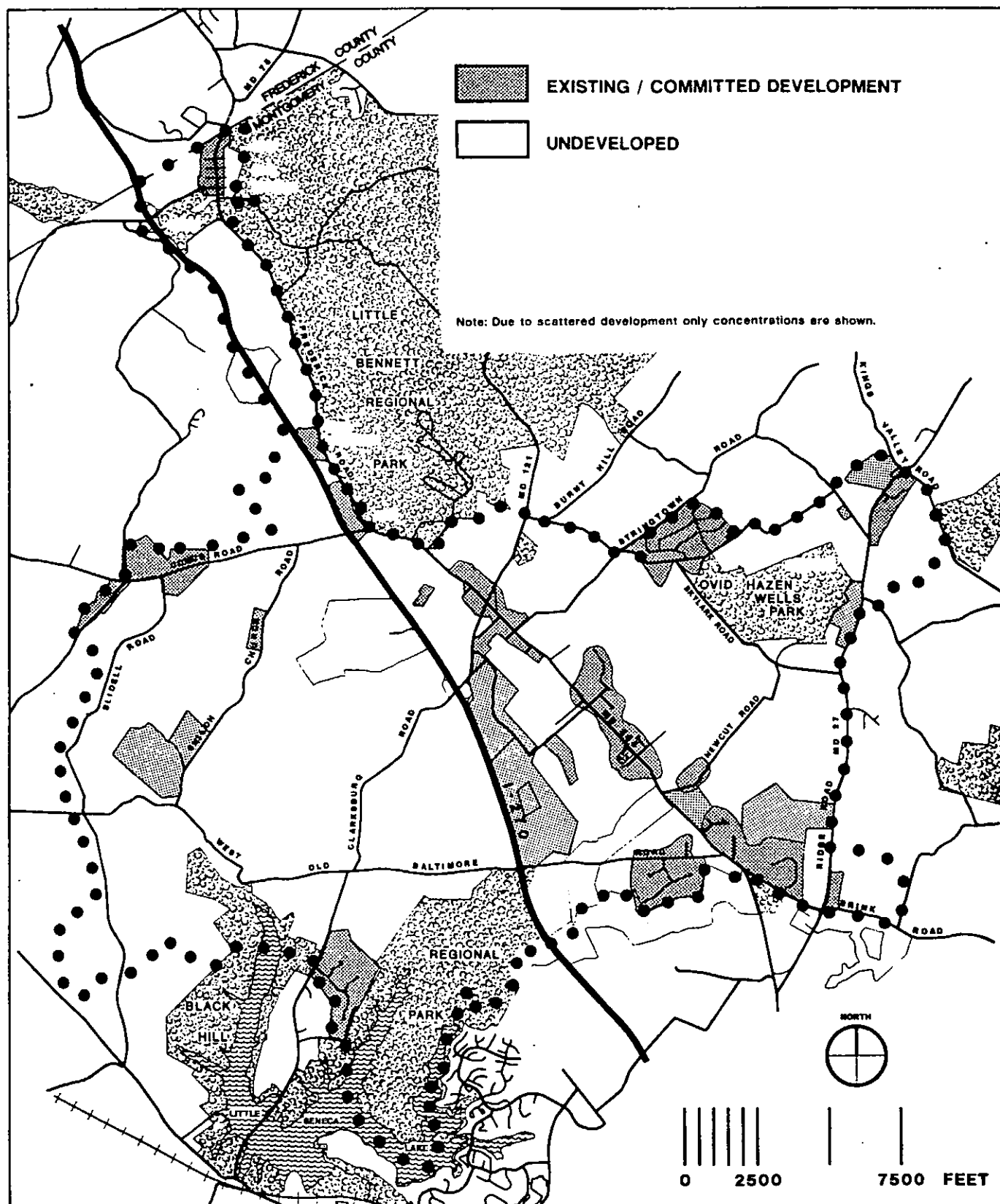
The Study Area includes approximately 10,000 acres located 20 miles northwest of Washington, D.C. and 15 miles southeast of the City of Frederick. The area is largely undeveloped and contains about 750 homes and 775,000 square feet of non-residential development. An additional 65 homes and 1,010,000 square feet of non-residential development have been approved and are in varying stages of construction. Much of the undeveloped land is farmed or vacant and being held for long-term development potential.

The existing and committed land use pattern is shown in Figure 1.

Table 2 summarizes the data collected in 1987 for the Clarksburg Study Area. While the Study Area and Planning Area boundaries are different, the characteristics shown in the table are generally representative of the entire Study Area.

Development Profile as of May 1993

Figure 1



Clarksburg Planning Area #13—1990 U.S. Census**Table 2**

	High-Rise	Garden Apt.	Town-House	Single-Family Det.	All Types
% Housing Units by Type				100%	100%
Household Population				1,382	1,382
Average Household Size				2.85	2.85
Number of 0-4 Year Olds				105	105
Number of 5-17 Year Olds				215	215
% <20 Year Olds				17.5%	17.5%
% >64 Year Olds				9%	9%
Median Age				37.6	37.6
Tenure - % Rental				13.0%	13.0%
% of Population in Same Home 5 Years Ago				55.6%	55.6%
% Non-White — Household Head				6.0%	6.0%
% Spanish Origin — Household Head				1.4%	1.4%
% With Graduate Degrees				18.4%	18.4%
1989 Median Household Income				\$54,590	\$54,590
Number of Workers				886	886
% Female Work Force Partic.				61.8%	61.8%
% Women with Children <6 Years Old Working Full- or Part-Time				41.0%	41.0%
Work Location:					
Montgomery County				678	678
Outside County				65	65
Outside Maryland				124	124
Work Trip:					
% Driving				89.5%	89.5%
% Public Transit or Rail				4.3%	4.3%

Source: U.S. Census Bureau, 1990 Census of Population and Housing, STF1B and STF3A. Prepared by Montgomery County Planning Department, Research and Information Systems Division: July 1993.

Land Use Plan

Tabular Summary of Land Use Plan Recommendations

Moderately Priced Dwelling Units

When consulting the Plan, it is important to note that, on any given property, the residential densities and allowable types of dwelling units shown are subject to the requirements of the Montgomery County Moderately Priced Dwelling Unit (MPDU) Ordinance. This ordinance is designed to ensure that new development includes some housing that is affordable by households of modest means. It applies to any residential development of 50 or more dwelling units that is constructed in any residential zone with a minimum lot size of one-half acre or less or in any planned development, mixed-use zone.

A portion of the units in any such development must be MPDU's. The prices of such units are controlled, and buyers or renters are subject to limitations on maximum income. The required number of MPDU's is based on the total number of dwelling units approved for the development. Effective in early 1989, the percentage ranges from 12.5 percent to 15 percent of the total number of dwelling units and is dependent on the level of density increase achieved on the site in question.

This density increase, or "MPDU bonus," is allowed as compensation for requiring some below-market-rate housing. The bonus may be no more than 22 percent above the normal density of the zone, according to the optional MPDU development standards in the zoning ordinance. In some zones, these standards also provide for smaller lot sizes and dwelling types than would be allowed otherwise. For example, the density of a subdivision in the R-200 Zone is normally two units per acre, the minimum lot size is 20,000 square feet, and only single-family, detached houses are permitted. In a subdivision developed according to

MPDU standards, the maximum density may be as much as 2.44 units per acre, the lot size for a detached house may be as small as 6,000 square feet, and some units may be townhouses or other types of attached dwelling units.

All residential calculations in this Master Plan include a 22 percent density increase to reflect the MPDU Ordinance provisions where applicable.

Housing Types

In terms of housing types, this Plan is envisioned to produce the following mix:

Table 3

	Current Mix (1993)		End-State	
	No.	%	No.	%
Detached	800	100		40 to 50
Attached	0	0		30 to 40
Multi-Family	0	0		15 to 25
Total Units	800		14,940	

The mixture of housing types reflects generalized assumptions regarding the types of units which different zones produce. The actual mix cannot be predicted with certainty since the unique characteristics of a site strongly influence housing mix.

For purposes of comparison, the current and estimated end-state residential mixes of the Germantown Master Plan are shown below:

Table 4

	Current Mix (1989)		End-State
	No.	%	%
Detached	3,545	18	30
Attached	9,843	51	30
Multi-Family	5,811	30	40
Total	19,199		

Source: 1989 Germantown Master Plan Interim Reference Edition

The comparison to Germantown in terms of housing mix is very relevant because of community perception in Clarksburg that Germantown is dominated by a single housing type: attached units. The Clarksburg Plan envisions an end-state mix that will be very different than what now exists in Germantown. Still,

attached units will be an important part of Clarksburg's future housing mix. The reasons for this are as follows:

- Changing the housing mix to include more detached houses would likely result in fewer houses overall because detached lots absorb substantially more land than attached units.
- Changing the overall mix to include more multi-family units could affect the vision of Clarksburg as a town rather than a Corridor City.

Of most significance is the fact that in Clarksburg, environmental constraints significantly reduce the amount of potentially buildable land. Since developable land proposed for residential uses must not only accommodate housing but public facilities (e.g., schools, parks) and roads as well, attached and multi-family housing types must be proposed if the transit serviceable town concept is to be achieved. Even at lower densities (two-four units per acre) environmental factors will likely discourage detached units. Environmental constraints will result in development being clustered on a smaller percentage of land than might be expected in less sensitive parts of the County. The tendency will be to produce more attached units.

This Plan does recognize, however, that vast concentrations of a single housing type is undesirable and for that reason proposes a diversity of housing types at the neighborhood level. (See Policy 7: Transit and Pedestrian Oriented Neighborhoods.) This Plan also proposes housing mix guidelines to help assure a full range of housing types in the Town Center, Transit Corridor, and the neighborhood centers.

Jobs/Housing Mix

A shorthand description of the balance between potential housing and potential employment is the "J/H" (jobs/housing) ratio. This ratio is derived by dividing the total number of jobs by the total number of housing units in a given area. A ratio of 5.4, for example, means that for every household in a given area, there are 5.4 jobs in that same area. A typical Montgomery County household produces on the average about 1.6 workers. A ratio as high as 5.4 means that a significant number of workers will have to commute from outside the Study Area to fill all the jobs, even if a high proportion of the resident workers work within the Study Area.

Table 5

	Existing & Approved A	Vacant Land Potential B	Anticipated Development A & B
Total Jobs	5,830	16,780	32,360
Total Housing Units	800	14,600	14,940
J/H Ratio	7.3	1.1	2.1

This Plan reduces the amount of employment recommended in the currently adopted 1968 Clarksburg Master Plan by approximately 227 acres and 32,360 jobs.

A comparison of the J/H ratio of the Approved and Adopted Plan to the 1968 Clarksburg Plan is shown in Figure 2, page 13.

Retail Uses

The Planning Department staff has evaluated future retail space needs in Clarksburg based on future population. Two types of retail needs were considered: neighborhood or convenience retail and comparison retail.

Neighborhood Retail Centers

Neighborhood retail centers, also referred to as neighborhood shopping centers, are anchored by a supermarket, perhaps with a pharmacy (now often found within the supermarket), and are usually visited more than once a week by most households. They usually incorporate other frequently visited stores and service establishments, such as video rentals, beer and wine stores, delis, sandwich and pizza restaurants, sit-down restaurants, dry cleaners, banks, and greeting card stores.

This Plan's neighborhood retail recommendations reflect the following findings:

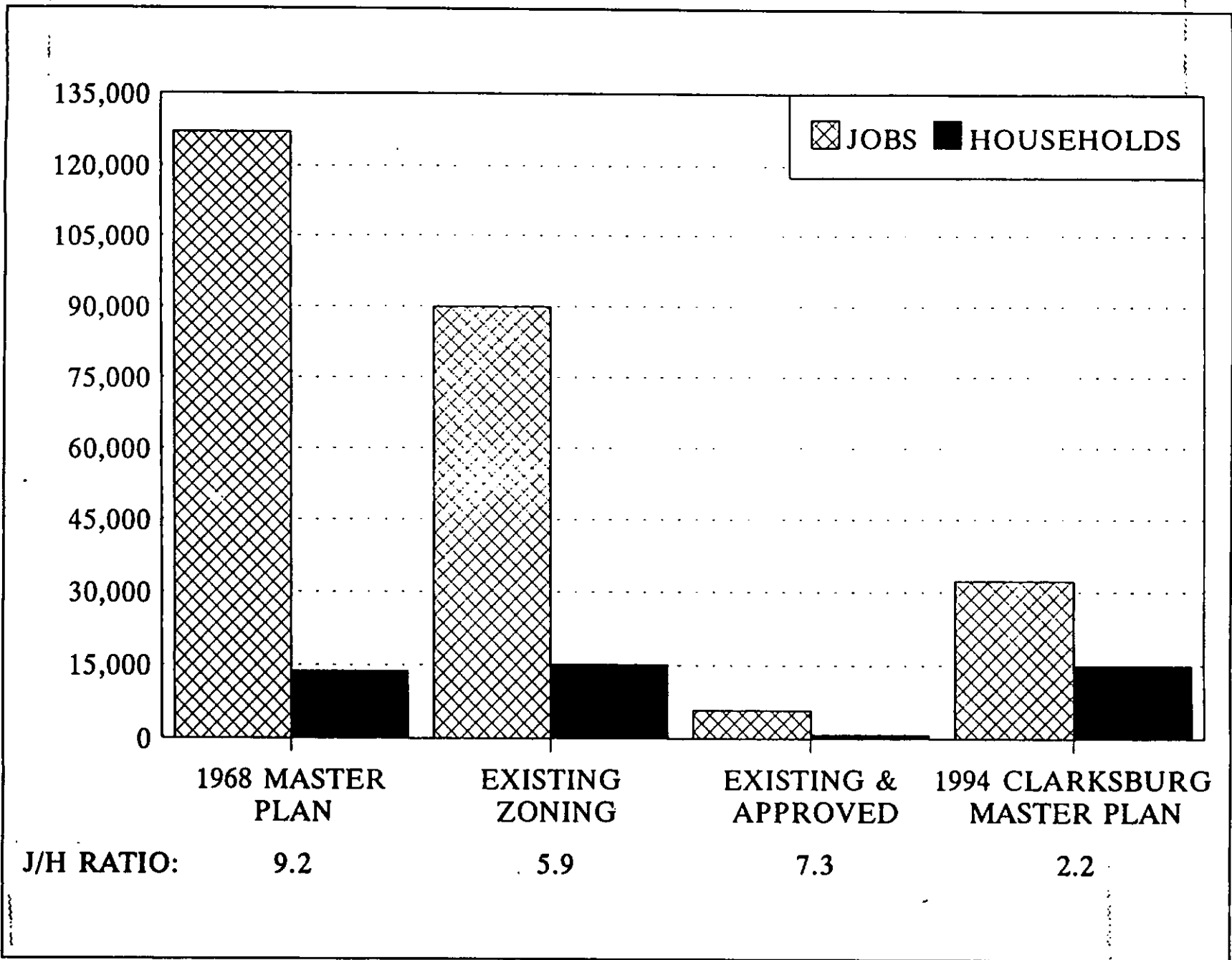
Amount of Square Foot of Neighborhood Shopping Centers Supportable in Three Clarksburg Market Areas

Table 6

	Captured Market Area*			Square Feet of Center Supported by Household & Employment
	Households	Population	Employment	
Town Center	6,000	13,800	3,400	130,000
East of I-270 (outside of Town Center)	5,400	13,200	1,000	112,000
West of I-270	3,500	8,400	1,800	75,000
* Market area for each Clarksburg site comprises a primary and secondary market. Source: M-NCPPC, Montgomery County Planning Department, Research Division				

Jobs and Households

Figure 2



Transportation & Mobility Plan

Transportation System Analysis

Analytical Process

The Model System

The EMME2 TRAVEL 1.0 AM peak hour transportation demand model was used as a tool to aid in the analysis of the complex interactions between end-state land development and transportation infrastructure within Clarksburg, as well as to develop an understanding of end-state land use/transportation interactions between Clarksburg and the region. The model system was calibrated to observe 1987 traffic conditions. A discussion of the land use and transportation network assumptions used in the transportation analysis is provided below.

The structure of the model system included a detailed representation of end-state land uses within the Study Area, as well as the surrounding upper Montgomery County areas of Damascus, Germantown, and Goshen. Significant effort was expended to modify the model structure to include an explicit representation of future land development and transportation improvements in Frederick, Carroll, and Howard Counties. This was done to more accurately reflect future traffic patterns in the Study Area, the remainder of Montgomery County, and the Greater Washington metropolitan area. In general, land development levels and a transportation network (comprising interstate and most state roads) reflecting conditions approximating the year 2020 time frame was assumed in this analysis for these areas.

Due to the Study Area's proximity to the Urbana region in southern Frederick County, particular attention was devoted to reflect development levels and transportation elements contemplated in the on-going Urbana Region Master Plan Update. These parameters include an assumption of approximately

29,000 jobs and 9,250 households within the Urbana planning region east of I-270 based on information provided by the Frederick County Planning Department. In addition, the expansion of MD 75 to four lanes and a western extension of this roadway to an interchange connection with I-270 in the vicinity of Dr. Perry Road is a major assumption in this analysis.

Specifically, the land use assumptions for the transportation analysis include the following:

- Master Plan build-out totals of approximately 32,360 jobs and 14,940 households for the Clarksburg/Hyattstown Special Study Area.
- For the Damascus, Germantown, Goshen, and Shady Grove areas, land use totals reflective of the respective master plans for these areas.
- For the remainder of Montgomery County and the region, land development levels consistent with those assumed in the Comprehensive Growth Policy "Trend" scenario. (This scenario assumed County-wide development levels of approximately 750,000 jobs and 450,000 households).

This Plan calls for a hierarchical network of roadways designed to carry regional through traffic, as well as facilitate mobility within the Study Area. For the remainder of Montgomery County beyond the Study Area, the full build out of the Master Plan of Highways was assumed.

Rationale for AM Peak Hour Analysis

An analysis of the AM (morning) peak hour travel conditions at end-state is determined to be sufficient for this analysis because of the mix of land uses contemplated in this Plan. Large amounts of retail development activity tend to attract significant numbers of non-work related trips into an area during the PM peak hour. These trips often result in conflicting turning movements at intersections and a closer balance between traffic volumes in the peak and off-peak directions during the PM (evening) peak period and therefore are a major factor in the determination of whether the AM or PM peak hour is the critical travel period for a particular area.

In comparison to retail development patterns in other I-270 corridor areas, which tend to include regional malls and substantial amounts of commercial retail development oriented linearly along MD 355, there is no such development pattern recommended in this Plan. Further, this Plan calls for retail employment activity to account for only about 5 percent of the total employment recommended for the Study Area and to be predominantly local in its market orientation, serving the Clarksburg Town Center and other neighborhood center areas.

Due to these factors, end-state PM traffic patterns within the Study Area were not analyzed as part of the modeling process since the results would be relatively similar to end-state AM traffic conditions.

Transportation Model System for Master Plan Analysis

Introduction and Background

The interactions between transportation and land use reflect the behavior patterns of people. These interactions and behavior patterns have been observed for decades throughout the United States and in other countries. When these interactions are reviewed broadly and quantitatively for a metropolitan area, the collective patterns of people's interaction can be seen as being repetitive and are therefore generally predictable. This general predictability can be applied to predict future travel behavior in a Master Plan Area.

Since the 1950s and 1960s regional planning agencies have been devising computerized transportation models of daily traffic for their regions. Computers have been needed to manage the large amount of data and calculations related to the forecasting of traffic. These forecasts are usually based on detailed estimates of the locational pattern of future households and jobs and assumed future transportation networks and services. The level of mathematics used in the modeling is generally quite basic, usually simple algebraic statements understandable to most people with high school or college educations. The large amounts of data being handled in the calculations, the many steps involved in linking parts of the models, and the use of jargon have often given the impression that these models are exceedingly complex. While the models may be thought of as complex in that they are constructed of many parts, we believe that with the investment of some time and effort they should be easily understandable by most Montgomery County residents. This has been written with that in mind.

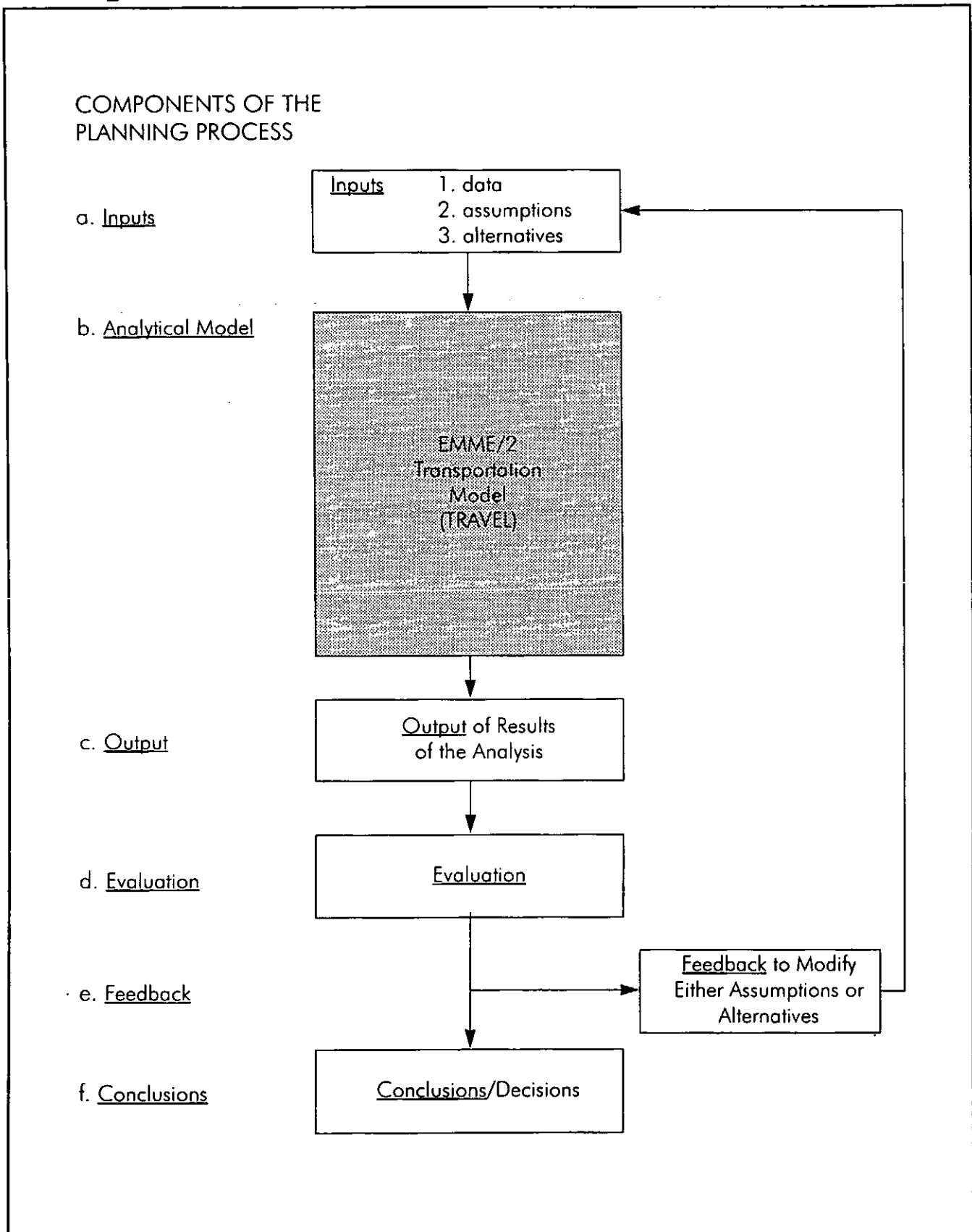
Overview of the Transportation Modeling System

Figure 3 presents the analysis context in which the transportation modeling system is used in the Master Plan process. This figure represents several components of the process that is used in planning analyses. The relationship among these components would be the same irrespective of whether the calculations are computed by computerized model or by hand. The methodology depicted in this figure is the same as that applied to assess transportation implications in the Annual Growth Policy process. Six basic components are identified:

- a) Inputs. This includes data, assumptions, and alternatives being analyzed.
- b) Analytical Model. The M-NCPPC computerized EMME/2 model.
- c) Outputs. Various tabular and graphical summaries of the results of the model analyses.
- d) Evaluation. Interpretation of the results by comparing them to some previously defined expectation.

Analysis Context in Using Transportation Model

Figure 3



- e) **Feedback.** This is used when the expectation of the previous component has not been met and a modification is made either to the assumptions or alternatives and the first four components of the process are repeated.
- f) **Conclusion/Decisions.** At some point in the process, conclusions and decisions need to be reached based upon the results and evaluation of the analysis outputs.

General Structure of Transportation Models

Transportation models are generally structured to analyze the flow of trips of people and/or vehicles over highways and/or transit networks throughout a specified geographic area. The geographic area is usually divided into many small sub-areas, termed transportation zones. The networks are usually defined by (a) points of intersection on the network, termed “nodes” and (b) segments of the networks between the nodes, termed “links”. These terms are schematically illustrated in Figure 4. This transportation model structure, made up of zones and networks, results in there being these two basic sets of data, assumptions, and alternatives as input components to the modeling process. A description of some specific aspects of the M-NCPPC model system is given below.

- (a) **Zone Data.** The primary model data relating to zones is the number of households and the number of jobs. The “jobs” data is divided into four categories; office, retail, industrial, and other. This primary zone data is supplemented by other data or assumptions, such as parking cost, access/egress times, and land area.

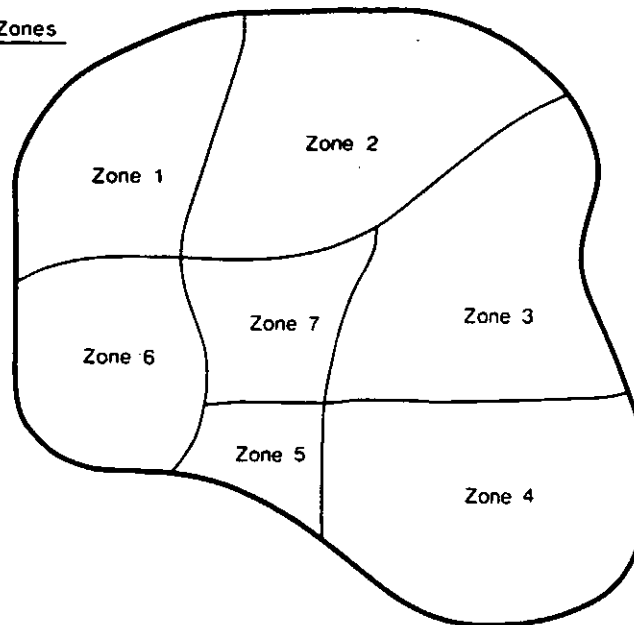
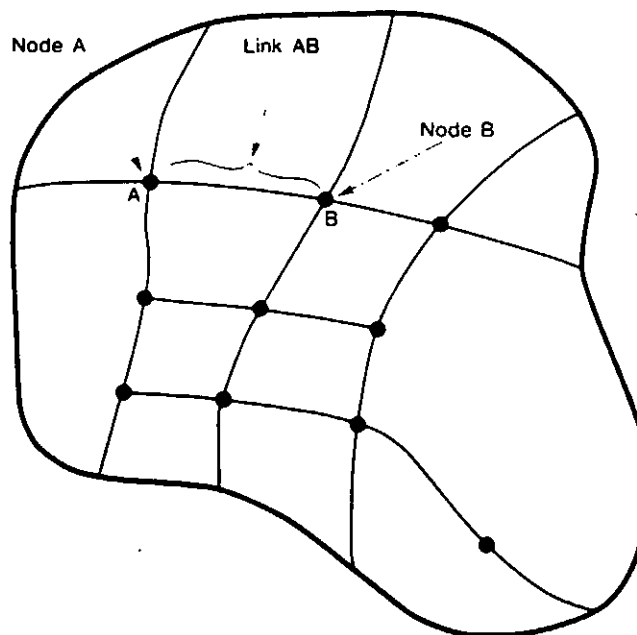
The traditional model systems used by the M-NCPPC have been based on a 351- transportation-zone system describing the Washington Metropolitan region. This consists of (1) 15 external stations describing areas outside the Washington Metropolitan region, (2) 246 zones within Montgomery County, and (3) 90 large zones encompassing the remainder of the region. Figure 5 shows the 246 traffic zones within Montgomery County. Figure 6 shows the traffic zones for the Clarksburg Study Area. The 90-zone regional geographic system external to Montgomery County is an aggregation of the 1,200 (estimated) zone system used by the Metropolitan Washington Council of Governments (MWCOC) for the entire region.

Within a Master Plan Area, this zone system is commonly broken down into smaller subzones to facilitate Master Plan analysis. In order to better model traffic within the area under study, Planning Areas adjacent to the subject Master Plan Area are often divided into smaller zones as well.

- (b) **Network Data.** The highway database contains more than 8,000 one-way links describing the region's transportation system. Each link has numerous attributes coded to it describing, for example, its capacity, design, speed, length, and location. Roughly half of these links are within Montgomery County, where the network provides a moderate level of detail, including all major and many secondary roads. Additional detail has been coded within the subject Master Plan Area and adjacent Planning Areas. This more detailed network generally corresponds to

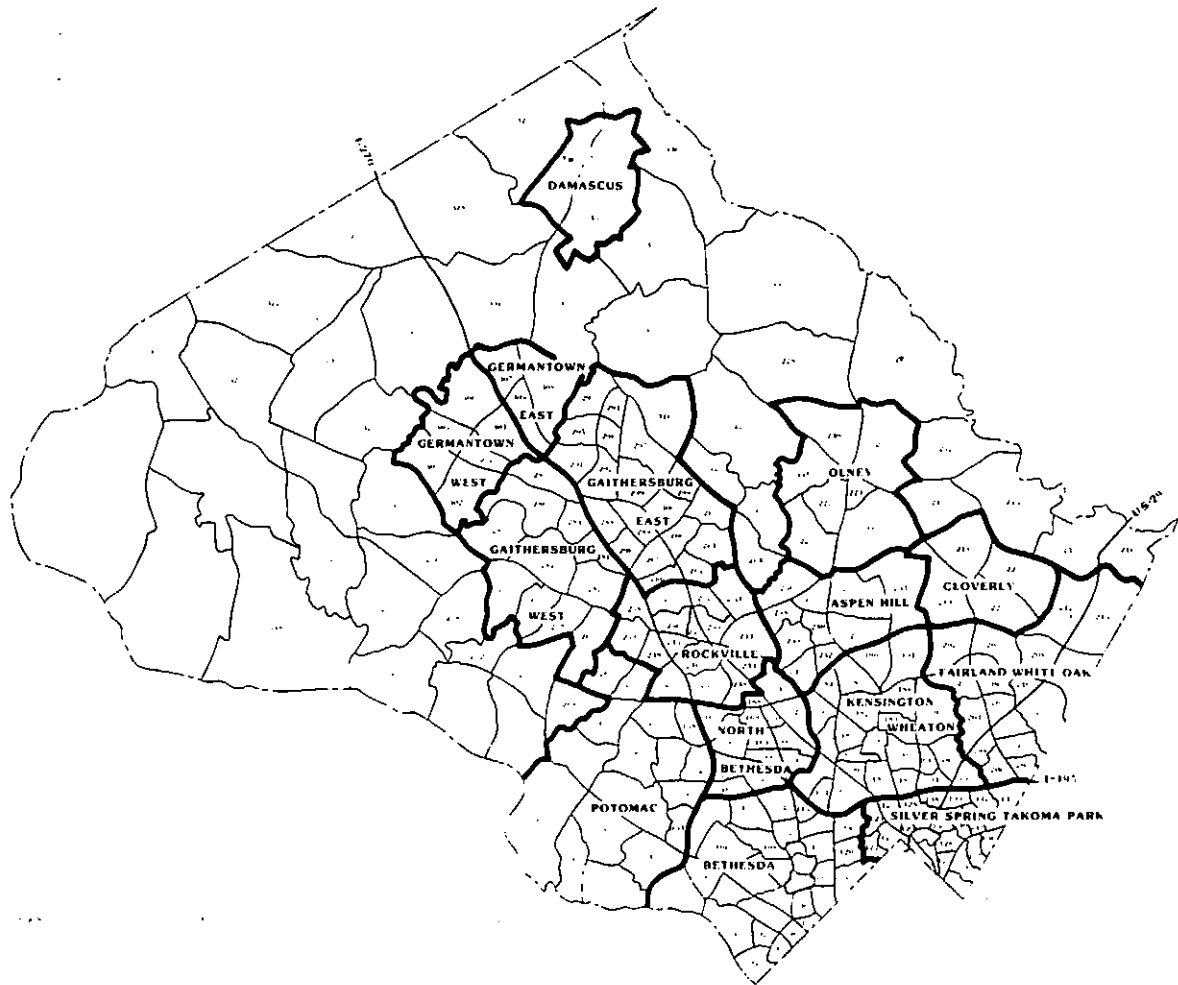
Schematic Structure of Using Transportation Model

Figure 4

A: Transportation ZonesB: Transportation Network

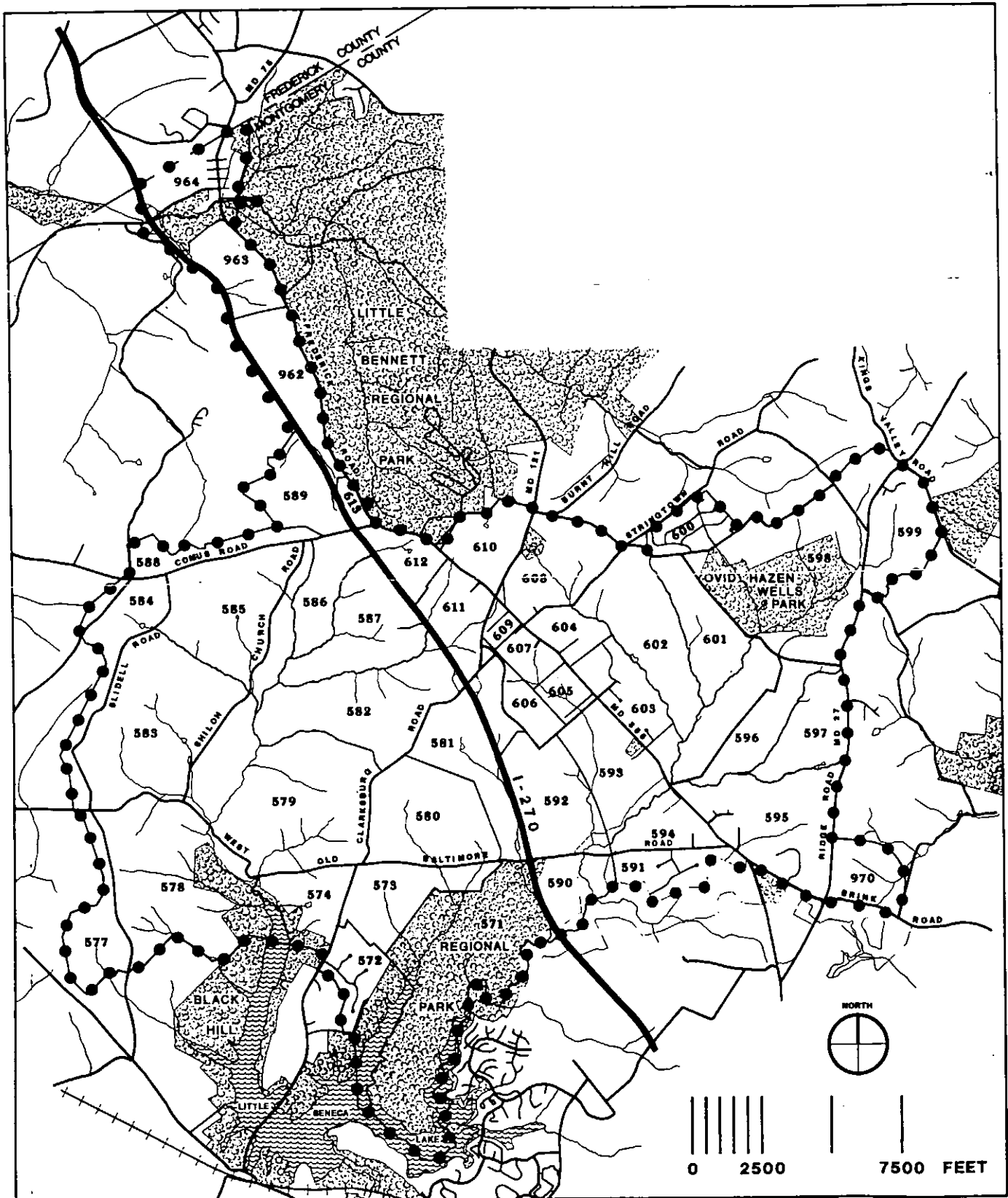
Policy Areas and Traffic Zones

Figure 5



Traffic Zones

Figure 6



each of the existing and proposed elements of the Master Plan roadway system for the area under study.

Typically, the transit network is coded “on top of” the highway network links. Transit speeds have, in most cases, been determined as a function of simulated automobile travel times on the links and a unit of stop delay per mile of link distance. This aspect of the model system reflects the fact that transit vehicles operating on the highway network are subject to the same congestion encountered by automobiles. Rail lines are coded on their own right-of-way. For Master Plan analysis, a transit system reflecting network and service characteristics anticipated for the year 2020 for automobile oriented sprawled development patterns outside the Master Plan study areas is typically used. Alternatively, mode share estimates (default values), which provide sufficient information to support a transit-sensitive AM peak hour model may be employed.

Regional Context of the Analysis

Today, as well as in the future, traffic and congestion levels in Master Plan areas depend upon many variables. Among those to be considered in each area are the location, mix, and intensity of local development and existing transportation facilities. It is also recognized that development levels and transportation facilities providing a subregional context beyond the Master Plan area play a major role in establishing levels of traffic and congestion within the area under study. In order to assess future traffic within a study area, a subregional context has to be developed using comparable land use activity and the Master Planned transportation facilities throughout the County, as well as those of the greater metropolitan Washington region. To do otherwise would result in travel patterns and traffic flows which would not be representative of a study area’s relative location in the region and subregion.

As such, the analysis framework used for this study assumes “background” land use and network conditions similar to those assumed in the General Plan Assessment of 1987, using County-wide totals of approximately 440,000 households and 750,000 jobs, as well as a full build-out of the Master Plan of Highways. In addition, specific land activity and road network assumptions consistent with recently adopted Master Plans were also employed. These background assumptions do not reflect the more clustered land use patterns tested in the Comprehensive Growth Policy Study of 1989, and hence reflect the relatively automobile-oriented planned sprawl of most currently adopted Master Plans. As such, these background land use assumptions may be inconsistent with planning a more transit and pedestrian friendly development pattern within and outside the Master Plan study areas. Traffic congestion levels inside Master Plan areas are rather sensitive to these background land use and network assumptions.

Specific Techniques Used Within the Transportation Model

Like most conventional regional transportation planning modeling systems, the M-NCPPC model uses a four-step modeling procedure. These four steps are

common to most transportation planning analyses, whether they are performed by computer or by manual calculations. The analysis techniques followed in these four steps are: (1) trip generation, (2) trip distribution, (3) modal choice, and (4) trip assignment. These steps are generally carried out in a sequential interrelated manner. However, there are many different techniques that can be used for each of these four steps. As such, any one particular transportation model is composed of a specific set of a combination of techniques that distinguish it from another model. Regardless of the technique used in a particular modeling step, each of the four steps is intended to answer one of the following basic questions:

Trip Generation. How many trips are there beginning and ending in each zone?

Trip Distribution. What is the pattern, or distribution of trips, beginning in a zone and ending in each of the other zones?

Modal Choice. What proportion of people traveling between any two zones will choose which mode among the available choices? How many people will occupy each automobile?

Trip Assignment. What is the particular path or route between any two zones in the transportation networks that should be assigned for the anticipated trips between the two zones?

Figure 7 schematically illustrates these four steps for a simple model structure.

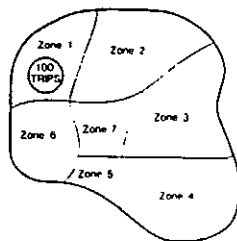
As indicated previously, a particular transportation model is distinguished from other models by the specific combination of techniques it uses for each of the four steps. The structure of models allows for different techniques to be used for each of the steps. The following briefly describes some of the specific techniques that have been incorporated into the M-NCPPC modeling system.

- a) **Trip generation** takes land use data on households and jobs, by zone, and calculates daily zonal trip (auto and truck) productions and attractions (i.e., point of origin and destination) for several trip purposes (e.g., Home-Based Work, Home-Based Shop, Home-Based Other and Non-Home-Based). The total number of trips is dependent upon what trip generation rates are used.
- b) **Trip distribution** evaluates the relative attractiveness of each destination to all others and distributes the trips on the basis of a "gravity" technique. Zone-to-zone travel times are used by the gravity technique to convert generated trips into a pattern of trips between all zone pairs. Like Newton's Law of Gravity, from which the name of the technique is derived, the number of trips between origin "A" and destination "B" is inversely proportional to the travel time between A and B and directly proportional to the attractiveness of B relative to all other destinations. Socio-economic adjustment factors (K-factors) are also applied in this step to account for interactions not readily captured by the assumption that travel time and the relative attractiveness are the only determinants in people's behavior which establish trip patterns. Stability of these K-

Schematic Illustration of a Four-Step Transportation Model

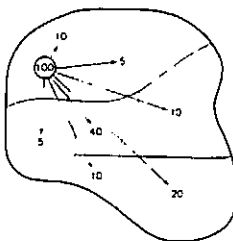
Figure 7

1. Trip Generation:



Zone 1 generates
100 person trips
productions

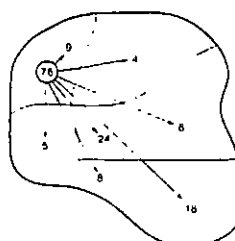
2. Trip Distribution:



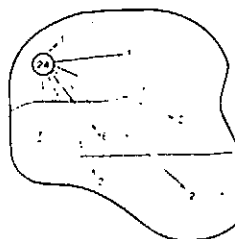
20% of the trips from
Zone 1 are distributed
to Zone 4, for example

3. Mode Choice:

A. Person Trips in Cars



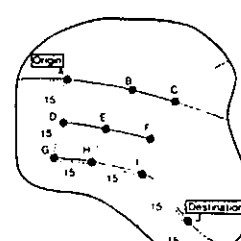
B. Transit Trips



2/20, or 10% of the
trips from Zone 1 to
Zone 4 choose to use
transit

4. Trip Assignment

A. Vehicle Trips on the Network



15 vehicle trips are assigned
to each link along route
A-D-G-H-I-J between Zone 1
and Zone 4

factors over time is uncertain, but in the absence of more specific knowledge, they are assumed to be constant.

- c) **Mode Choice** techniques generally evaluate the relative time and cost of traveling between each origin-destination and the quality of conditions for access to and from public transportation by foot or bicycle. Using other empirical observed relationships, the mode choice technique calculates the percent of trips between each zone pair that will likely be made either by automobile or transit. These factors are used to split the Home-Based Work (HBW) person trip table into a HBW auto driver and a HBW transit passenger trip table. The key components generally used to assess transit use and automobile occupancy are the relative travel time and travel cost from "A" to "B" by auto and transit and the quality of the pedestrian and cycling environment and mix of land use at a small scale. These costs include parking and fares for each mode.

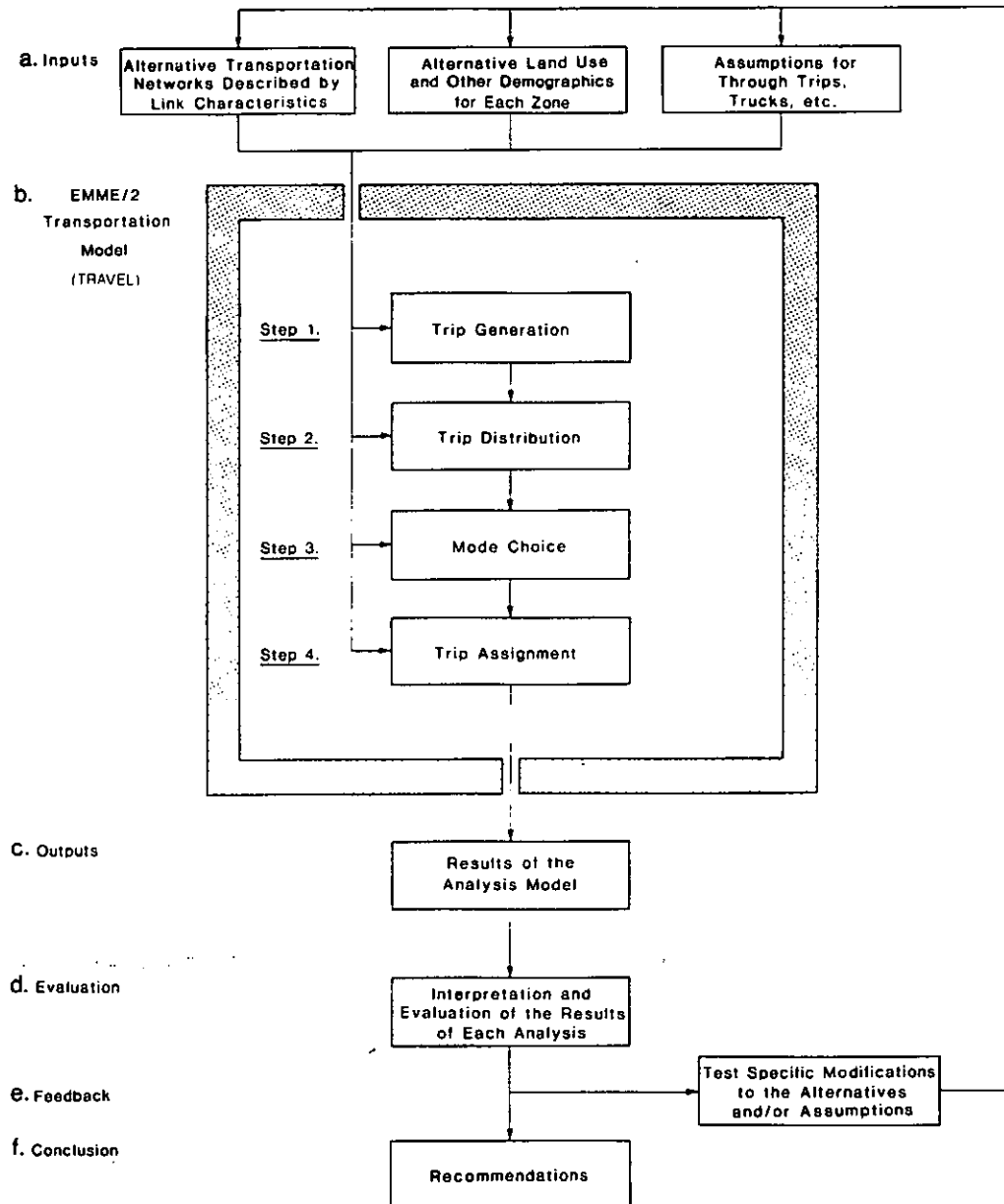
In lieu of this technique, estimates of the percentage of trips that will likely be made between each zone pair by either automobile or non-automotive mode are borrowed from earlier and cruder models developed by other agencies. These mode share percentages are applied to the HBW person trip table to develop a HBW auto driver trip table and HBW transit trip table. The assumed default values were derived from several sources including: (a) the 1980 Census, (b) a 1987 simulation by MWCOG of 1985 mode shares, and (c) an earlier MWCOG simulation done in 1979 which represents Metrorail in the late 1990's.

- d) **Network assignment** is accomplished by first combining the trip data for the various trip purposes into composite daily or peak hour data. This composite data is then assigned to the highway network. Different techniques exist for assigning these trips to individual paths in the transportation network. These techniques generally seek to minimize delay or travel time in selecting travel paths and include the consideration of link capacity and congestion effects. The equilibrium traffic assignment technique is used in the Master Plan model system. The equilibrium technique assigns vehicles to the roadway system in such a way that travel time from origin to destination cannot be reduced by switching to an alternate path.

Figure 8 shows how these four basic step within the transportation model relate to the analysis context in Figure 3. The inputs involve: (1) network descriptions for each link, (2) land use and demographic information for each zone, and (3) assumptions or data relating to items such as through traffic or truck trips. Depending on the specific techniques used in constructing the model, these inputs can be used in any combination of the steps within the transportation analysis model (see Figure 8, page 27). Figure 8 diagrams the general relationship between the analysis process and model steps and may appear to be complex to those unfamiliar with analytical models. However, compared to the computer programs used to do the modeling, Figure 8 is a gross simplification. Much of this material is an adaptation of the chapter describing the transportation model used in the Annual Growth Policy process, which has been presented in the Planning Board's Report: Alternative Transportation Scenarios and Staging Ceilings, December, 1987.

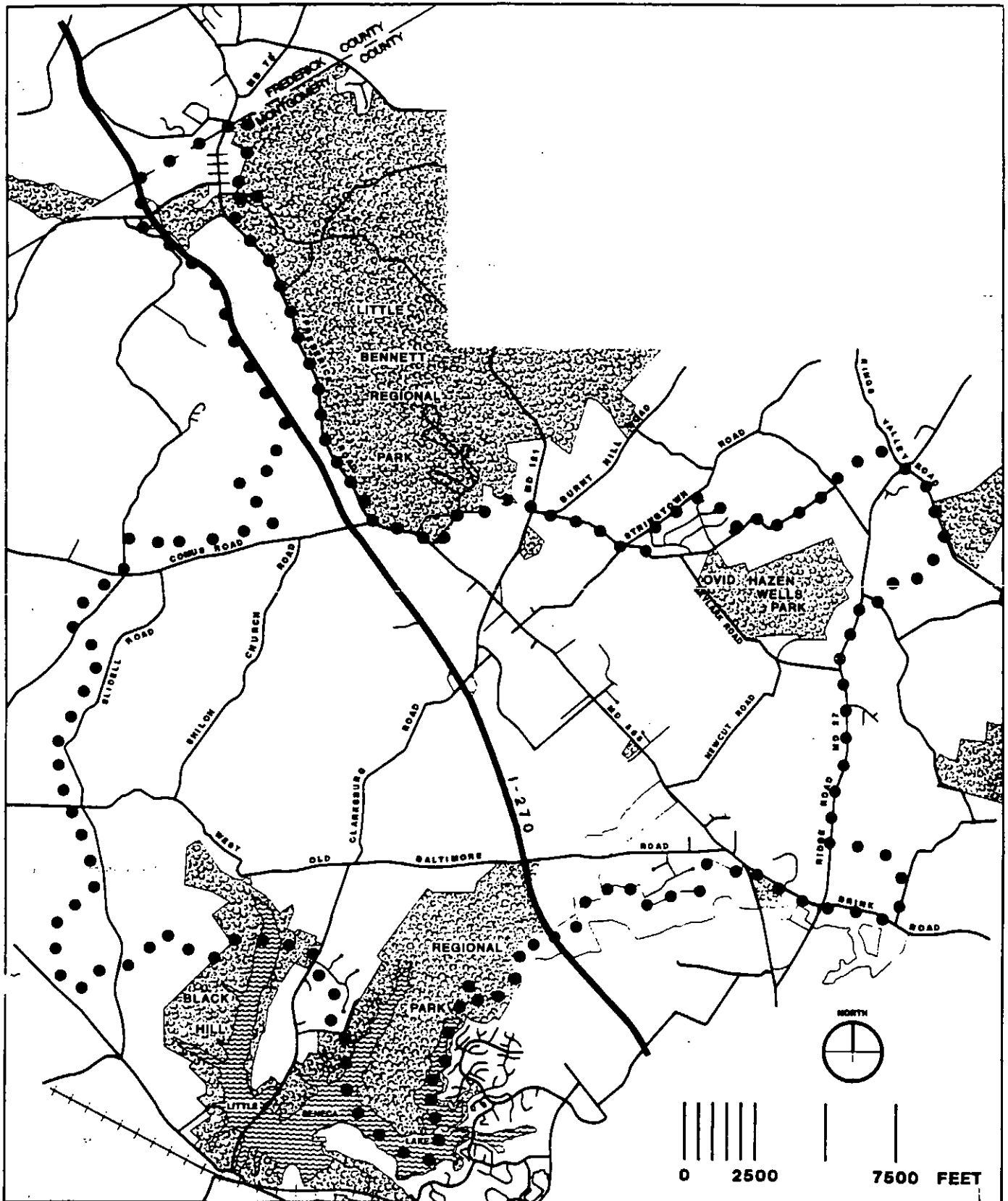
Relation of the EMME/2 Model to the Analysis Context

Figure 8



Existing Roadway Network

Figure 9



Roadway System Analysis

Current Network and Peak Hour Traffic Conditions

The existing roadway network is depicted in Figure 9. Relative to areas south of Clarksburg along the I-270 Corridor, the existing roadway network within Clarksburg and vicinity is limited.

Current traffic patterns in the Study Area are heavily dominated by through traffic (trips with both origins and destinations outside the boundaries of the Study Area). This results from interstate travel on I-270 as well as commuter travel along I-270, MD 355 and MD 27 between residential areas located to the north of the Study Area and the I-270 employment corridor to the south. Through trips account for about 90 percent of all southbound AM peak hour travel in the Study Area.

Two major traffic corridors, along I-270/MD 355 and along MD 27, carry the vast majority of traffic in the Study Area. Morning peak hour traffic patterns along these routes show approximately 75 percent of all traffic oriented in the southbound direction, the remaining 25 percent oriented to the north. Morning peak hour traffic conditions along the I-270/MD 355 corridor show southbound I-270 operating near capacity, at level of service (LOS) E, through the Study Area. Southbound MD 355 operates at LOS C in the AM peak hour. Morning peak hour conditions show southbound MD 27 operating at LOS D. The remaining roadways within the Study Area, which serve predominantly local traffic, primarily function at LOS A or B. The definition of these roadway levels-of-service as a function of roadway capacity is provided in Table 7.

Road Segment Level of Service

Table 7

LOS	Percent of Capacity
A	50 - 59%
B	60 - 69%
C	70 - 79%
D	80 - 89%
E	> 90%

End-State Network and Traffic Conditions

Area-Wide Level of Service Analysis

Given the level of transit service anticipated in this Plan, an end-state average area-wide level of service (LOS) standard C/D was assumed for the Clarksburg Study Area to evaluate the operation of the highway and transit systems. This standard is equivalent to the master-planned average area-wide level of service standard for Germantown and is based on the provision of a moderate level of

public transportation service as defined by the County's Annual Growth Policy (AGP). This service would include the operation of the Corridor Cities Transitway through the Study Area, commuter rail service at the Boyds MARC station, and a feeder bus service linking developed areas to transit stations. Presently, the Study Area has no area-wide transportation service standard due to the marginal availability of public transit in the area.

The findings of the average area-wide level of service analysis are indicated below:

- This Plan's recommended transportation network can support the recommended land use option (approximately 32,360 jobs and 14,940 households) based on an average area-wide LOS C/D standard.
- The land use and transportation recommendations called for in this Plan will not adversely affect the end-state average area-wide LOS C/D standard in the adjacent Germantown Planning Area.

Trip Distribution Analysis

Trip distribution patterns (i.e., the orientation of trips between origins and destinations) are heavily influenced by the level and mix of land uses within an area, as well as the transportation system serving that area. Compared to existing conditions, this Plan recommends significant changes in both the level and mix of land uses, as well as transportation infrastructure, within the Study Area. Similarly, land development and transportation facilities throughout the region will change significantly as well and will influence trip distribution patterns for the Study Area.

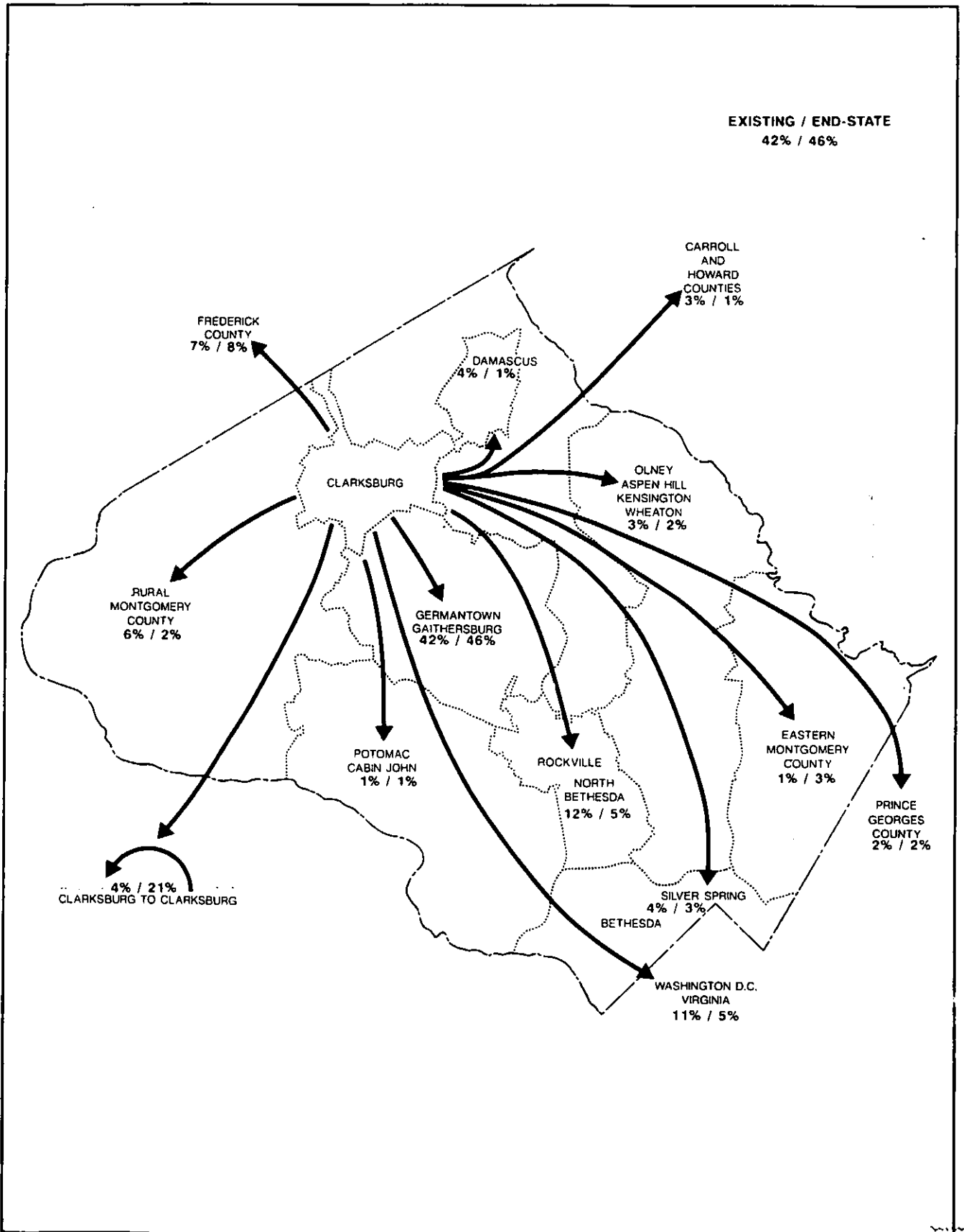
Presently, there are approximately 1,800 jobs and 750 households within the Clarksburg Study Area. County-wide, jobs and households totals are presently about 380,000 and 260,000, respectively. As discussed earlier, the transportation network as well as land development levels for both the Study Area and the region will change significantly between existing conditions and the end-state zoning capacity.

Hence, end-state trip distribution patterns for trips to, from, and within the Study Area will differ from current conditions. These differences are depicted in Figures 10 and 11 which show the distribution of work trips to and from Clarksburg for both existing (1987) and end-state time frames.

The end-state trip distribution analysis of resident work trips from Clarksburg shows that the vast majority, approximately 80 percent, of workers residing in the Study Area are estimated to be employed along the Montgomery County/Frederick County I-270 Corridor. As a subset of this percentage, about 21 percent of workers within the Study Area are estimated to both live and work within the Study Area. Another 8 percent are estimated to be employed in the Bethesda-Silver Spring and Washington, D.C.-Northern Virginia areas. The remaining 12 percent of workers living in Clarksburg are estimated to be employed in other locations throughout the region.

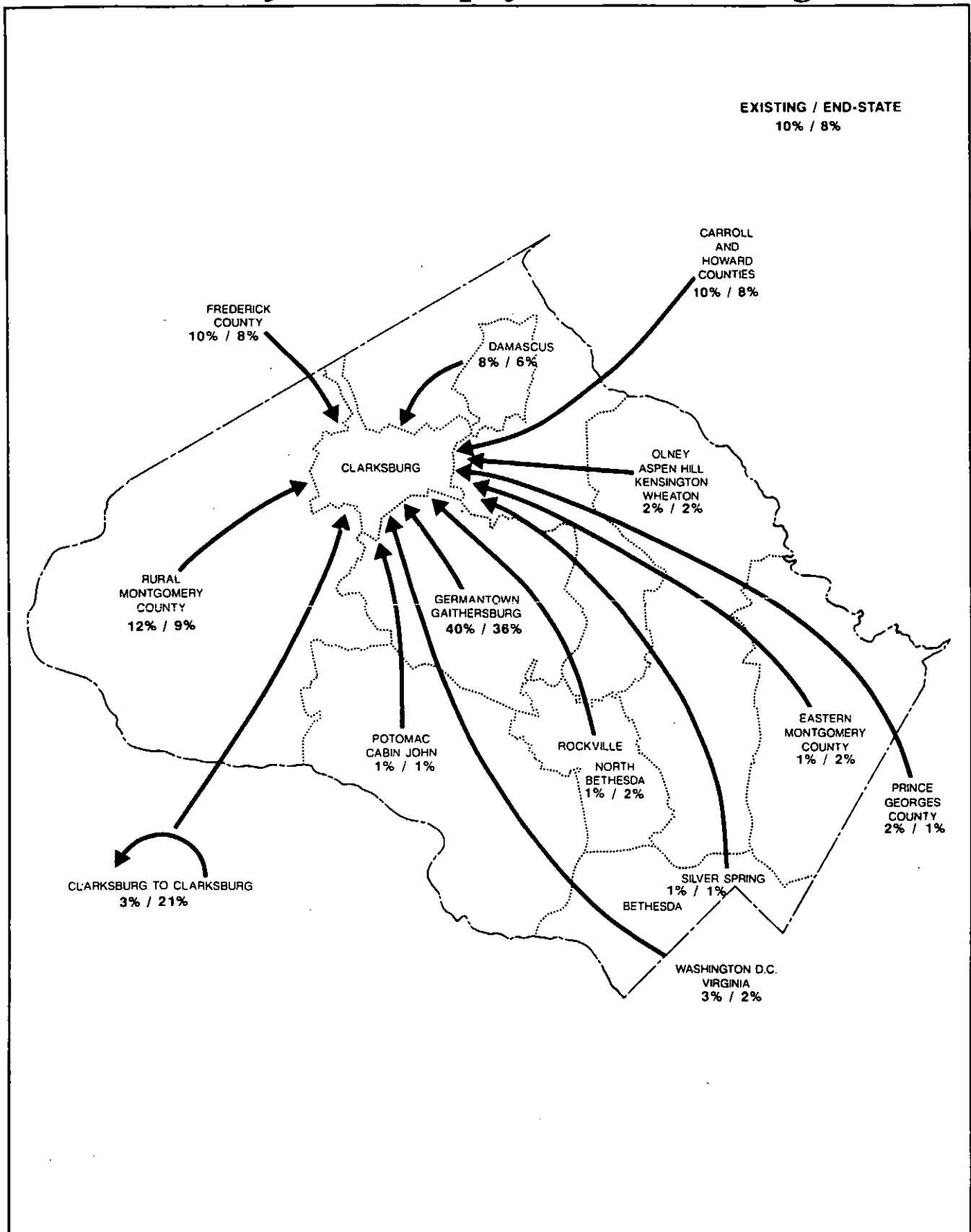
Distribution of Work Trips from Clarksburg

Figure-10



Distribution of Work Trips from Clarksburg

Figure 11



A similar end-state analysis of work trips to the Clarksburg Study Area shows that about 75 percent of those persons with work destinations in the Study Area are estimated to have origins from Clarksburg and the nearby areas of Germantown-Gaithersburg, rural Montgomery County, and Frederick County. Another 14 percent of Clarksburg workers are estimated to come from residences in Damascus as well as Carroll and western Howard Counties along MD 27. The remaining 11 percent of Clarksburg workers are estimated to come from other areas of the metropolitan region.

Through Traffic Analysis

The effects of through traffic will continue to be a pervasive influence on traffic conditions within the Study Area, accounting for about 85 percent of all southbound AM peak hour trips. The vast majority, about 80 percent, of these trips will originate from jurisdictions north of Montgomery County (i.e., south-central Frederick County along the I-270/MD 355 corridor and the Mt. Airy area of Carroll County, eastern Frederick County along MD 75, and western Howard County along MD 27). Through traffic will comprise the dominant component of AM peak hour traffic along I-270.

The development of the Urbana area as a major employment node in its own right will provide increasing numbers of Frederick and Montgomery County residents with the opportunity to work in the Urbana area, thus reducing the need for Frederick County workers to travel in the peak direction through Hyattstown and Clarksburg to reach workplace destinations along the I-270 Corridor in Montgomery County. Further, employment opportunities in Upper Montgomery and Frederick Counties provide reverse commuting options which improves the off-peak utilization of the roadways and the transitway.

Despite increasing employment opportunities within the Study Area, there appear to be limited policy measures, short of significantly down-zoning employment land uses along the I-270 corridor south of Clarksburg, which the County alone could undertake to limit the growth of through traffic within the Study Area. This suggests the need to develop regional policy measures to address this issue.

The amount of through traffic raises concerns regarding the appropriate methodology for accounting for this traffic in the measurement of policy area level of service for the Study Area at end-state, as well as within the context of the AGP. As such, this issue could affect the timing of the implementation of the land use recommendations of this Plan. The Study Area's average area-wide LOS as computed, including I-270, is projected to be in the upper range of C/D. When I-270 traffic volumes are excluded, the average area-wide LOS improves to C.

The transportation network recommended in the Plan provides the needed capacity and multiple travel routes to mitigate through traffic effects on the historic districts located in Hyattstown and Clarksburg. Transportation recommendations resulting from the 1992 *Damascus Master Plan Amendment* should limit through traffic impacts on the Cedar Grove Historic District along MD 27.

Transit System Analysis

Current Conditions (as of 1993)

Current public transit service in the Study Area is limited to a single Ride-On bus route (Route No. 75) along MD 355 linking Clarksburg, Hyattstown and Urbana to the Shady Grove Metro station and commuter rail service at the Boyds MARC station. The 1987 Census Update Survey estimates that less than 10 percent of employed residents in the Study Area take public transit to work.

As a service to Frederick and Washington County commuters traveling through the Study Area, the Mass Transit Administration (MTA) operates peak period commuter bus service along I-270 linking Hagerstown and the City of Frederick to the Shady Grove Metro station.

End-State Conditions

This Plan calls for improving current transit service through the provision of a transitway, improved MARC commuter rail service, high-quality feeder bus service linking developed areas to transit stations, transit serviceable development patterns in proximity to the transitway, and transit-supportive infrastructure (e.g., sidewalks and bikeways) which could encourage non-motorized access to transit. To a great extent, these improvements are contemplated to be focused on the east side of I-270 where the bulk of development is recommended.

The anticipated end-state use of transit and carpooling for the Study Area is the result of this traffic analysis based on the relative attractiveness of each mode of travel for the end-state land uses. A summary is provided in Table 8:

End-State Commuting Patterns, Daily Home to Work (%) Table 8

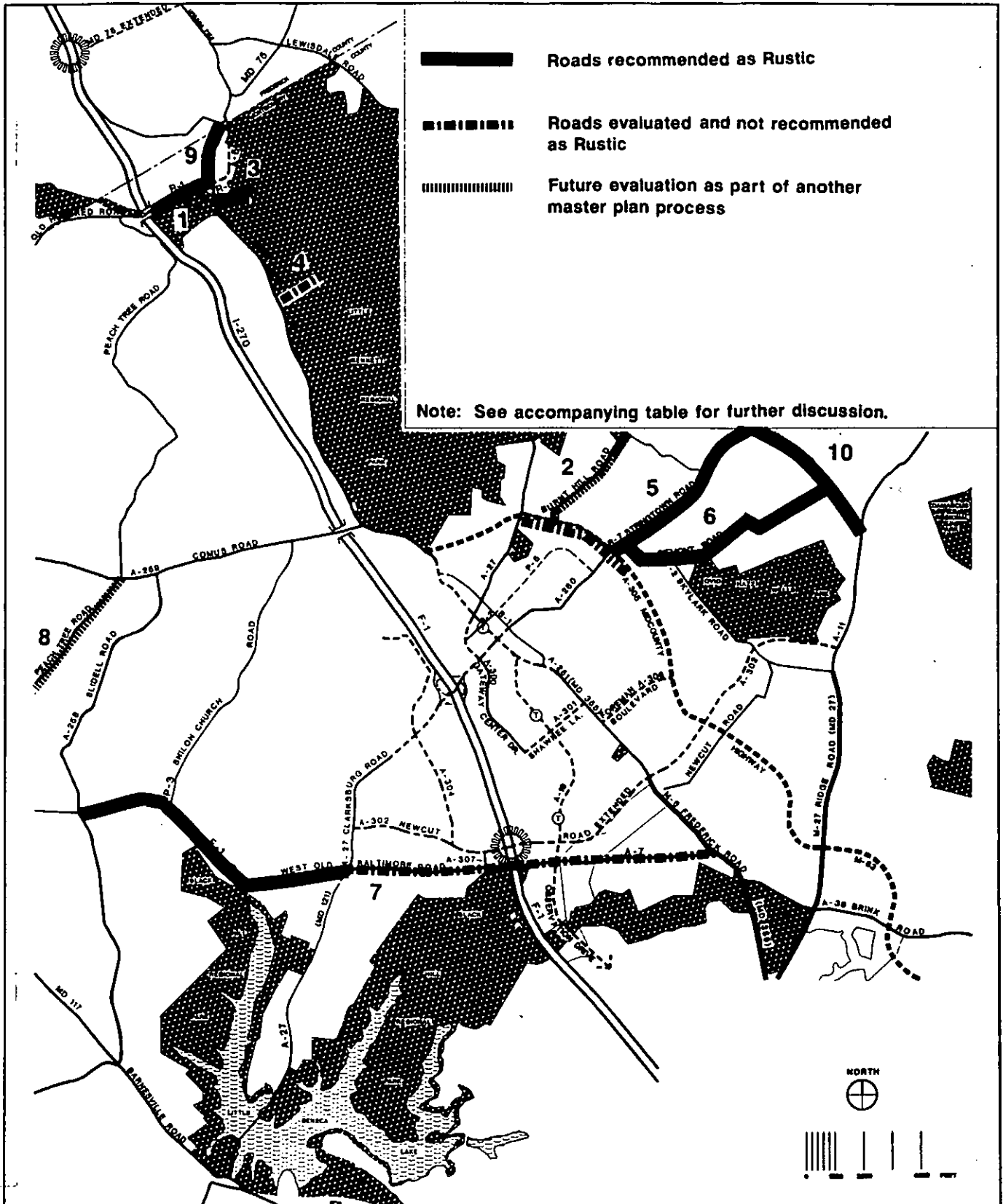
	Auto Driver	Auto Passenger	Transit	Walk/ Bike
% Study Area Residents	75	8	13	4
% Study Area Workers	78	8	9	5

Discussion of Rustic Roads

The Clarksburg Master Plan designates certain roads as "rustic." (See Figure 12, page 35.) The Master Plan explains the Rustic Roads Program and describes the criteria for both "Rustic Roads" and "Exceptional Rustic Roads." The relationship of the Plan designated rustic roads to this criteria is discussed below:

Rustic Road Recommendations

Figure 12



Old Hundred Road (MD 109)

This section of MD 109 is approximately .61 miles in length, extending from the interchange with I-270 on the west to Frederick Road (MD 355) on the east. West of I-270, this road continues through the Agricultural Reserve to Barnesville and then to Poolesville.

Description: It is a 28-foot-wide paved road with pavement markings and has curbs along the pavement edge. The road is along the side of a hill with the south side sloping down to the adjacent stream. Woods on each side provide an enclosed feel to the road. Utilities are along the south side, as is a guard rail for part of the distance. This road connects I-270 and Frederick Road (MD 355).

Criteria: The road traverses an area where natural features predominate. It is a narrow road in the sense that there is no grading on either side of the road, but the pavement itself is not narrow. This section of roadway is not included in MCDOT's map showing annual average weekday traffic. No volume information is available for the road, but it is evident that the volumes that it carries today do not detract from its rustic character. The road is bordered by woodland, parkland, Hyattstown Historic District, and land recommended for rural, residential use. This road is shown on the 1865 Martenet and Bond's Map of Montgomery County as a stage road.

The road had one reported accident in the period 1989 through 1991. There is no indication that it has an accident history that would suggest unsafe conditions. The classification of this road as a rustic road would not impair the function of the roadway network, nor would it impair the safety of the roadway network. The Clarksburg Master Plan supports removal of the I-270 interchange if a new interchange is constructed in Frederick County; MD 109 is not anticipated to be needed for a significant amount of new traffic.

Significant Features: The setting is a significant feature of this road. The road grades contribute to the rustic character of the road. The view is enclosed by trees on both sides for much of its distance.

Rustic Road Network: This road intersects MD 355. North of the intersection, MD 355, through the historic district of Hyattstown, is recommended to be classified as a rustic road. MD 109 to the west is on the County Council's Interim Road list.

Master Plan of Highways Designation:

Rustic R-1

Right-of-way, 80 feet

Hyattstown Mill Road

Hyattstown Mill Road intersects Frederick Road (MD 355) immediately south of Old Hundred Road (MD 109) and extends eastward to Clarksburg Road with the ford through Little Bennett Creek being closed. Approximately .78

mile from MD 355, the road joins Prescott Road. The combined road goes through Little Bennett Creek (the aforementioned ford) before dividing into two individual roads again with Hyattstown Mill Road going southeast and Prescott Road going northeast to Lewisdale Road. Both roads are almost entirely within Little Bennett Regional Park and are therefore exempt from usual roadway standards and development activity. The portion of Hyattstown Mill Road being designated as a rustic road is the public portion – approximately .11 miles between Frederick Road (MD 355) and the park.

Description: This short section of Hyattstown Mill Road is between 15 and 19 feet wide with a gravel surface and no provision for drainage. The road passes between an M-NCPPC park playground and a commercial parking lot at its junction with MD 355 and leads into the park, although the road is closed east of Prescott Road in the park. The road leads to Hyattstown Mill, a historic feature at the edge of the park. The land adjacent to the road is level, with mature trees, in particular a walnut tree. As you approach the park, the character of the road becomes enclosed rather than open.

Criteria: The road is located in an area where natural and historic features predominate. It is a narrow road, clearly intended for local use, and an extremely low volume of traffic. The road has natural features along part of its border and provides access to the historic resource of Hyattstown Mill and a route through a portion of Little Bennett Park via Hyattstown Mill Road and Prescott Road returning to MD 355 to the south. This road is the southern boundary of the Hyattstown Historic District. The accident history does not suggest unsafe conditions. One accident was reported for the three-year period 1989-1991. The rustic road classification will not impair the function or safety of the roadway network.

Significant Features: The one-lane character of the road, the gravel surface, the access to the mill house in the park, and adjacent vegetation.

Rustic Road Network: This road is near but does not connect to R-1 (Old Hundred Road) and R-3 (Frederick Road).

Master Plan of Highways Designation:

Exceptional Rustic R-6

Right-of-way, 60 feet

Stringtown Road

This section of Stringtown Road is approximately .61 miles in length, extending from the future Midcounty Highway to the Study Area boundary. West of Midcounty Highway, Stringtown Road is master planned as an arterial roadway (A-280) to be realigned and connect directly with Clarksburg Road (MD 121) and then with Interstate I-270 at the Clarksburg interchange. To the east, Stringtown Road continues in the Agricultural Reserve to Kings Valley Road. Stringtown Road to the east is included on the County Council Interim List for Rustic Roads.

Description: Stringtown Road is paved, approximately 18 feet wide. It has no curbs and slight gravel shoulders with a drainage ditch along a portion of one side of the road. At the western end of this road, Piedmont Road (also a rustic road) is recommended for realignment, consistent with the rustic road character of these two roads, in order to create adequate intersection spacing between Midcounty Highway and Piedmont Road. This section of Stringtown Road has one other intersection, that of Needle Drive on the south side of the road. Needle Drive is part of the street system for the Fountain View subdivision which lies between Stringtown Road and Piedmont Road.

The road has, particularly on the north side, vistas of farmland, open fields and an old farm house. On the south side is the aforementioned subdivision. The road has views to the north away from Clarksburg.

Criteria: The road traverses an area where natural and agricultural features predominate. It is a narrow road. This section of roadway is not included in MCDOT's map showing annual average weekday traffic; therefore, no volume information is available. The road is bordered by farmland and a small subdivision. This section of Stringtown Road had no reported accidents for the period 1989 through 1991. The classification of this road as a rustic road would not impair the function of the roadway network nor would it impair the safety of the roadway network.

Significant Features: The setting of this road within the terrain is a significant feature, as are the views from the road to the north away from Clarksburg.

Rustic Road Network: This road connects with Piedmont Road, and both Piedmont Road and Stringtown Road (outside the Clarksburg Study Area) connect with Hawkes Road. These three roads form a small rustic roads network.

Master Plan of Highway Designation:

Rustic R-7

Right-of-way, 80 feet

Piedmont Road

Description: Piedmont Road is approximately 1.66 miles long and connects Stringtown Road on the west with Hawkes Road on the east. Piedmont Road is an 18-foot wide paved road with grass shoulders. The road has both edge lines and a center line. The one stream crossing is a culvert. Needle Drive and a cul de sac named Remae Court intersect with this roadway on the north side; Skylark Road intersects it on the south side. The adjacent terrain is level and the views are open. Ovid Hazen Wells Park is on the east side. The park land is currently cultivated fields. The road has sharp turns and the appearance of a somewhat modern rural roadway.

Criteria: Piedmont Road has agricultural uses on one side. Those features

seem to be the predominate character of the area. It is a narrow road and is intended for predominantly local use. It is a low-volume road (not included on MCDOT's Average Annual Weekday Traffic map) and has outstanding vistas of farm fields and rural landscape for a portion of its length.

During the three-year period of 1989-1991, seven accidents occurred along this section of Piedmont Road. One of these accidents occurred at Hawkes Road; the others occurred at non-intersection locations. The one at the intersection was an early morning accident with no identified cause; the others occurred during the evening and speed was identified as a contributing cause. One of these accidents involved two vehicles; the others were single vehicles running off the edge of the road. Two of the accidents, including the two-vehicle one, had possible injuries; the others were property damage only.

This road is not needed to serve a major increase in transportation. A realignment at Stringtown Road is recommended in the Clarksburg Master Plan in order to create adequate separation between the future intersection of Midcounty Highway (A-305) and Stringtown Road. That realignment should be in keeping with the rustic character of both Stringtown Road and Piedmont Road.

Significant Features: The view of the road as it fits into the adjacent terrain of open fields.

Rustic Roads System: Piedmont Road forms a system of rustic roads when paired with Stringtown Road and Hawkes Road.

Master Plan of Highways Designation:

Rustic Road R-5

Right-of-way, 70 feet

West Old Baltimore Road

West Old Baltimore Road is a historic alignment, having gone originally from the C & O Canal at the mouth of Monocacy Road to Baltimore. The road extended across Montgomery County. Portions of this road still exist in the eastern part of the County where it is called Old Baltimore Road. This section extends from Frederick Road (MD 355) westward to the boundary of the Clarksburg Master Plan. The rustic road designation has been reviewed in three sections since the travel needs and the character of the road differ for different sections. The section of this roadway between MD 355 to MD 121 is needed for the roadway network and is not recommended as a rustic road. The remaining portion of this road between Clarksburg Road (MD 121) and the western study area boundary meanders through a rural area that is partially wooded and crosses Ten Mile Creek as a ford. This section is recommended as a rustic road as described below.

Description: West Old Baltimore Road in this section is approximately 19 feet wide, paved, with partial curbs in places. The road has extensive vegetation along both sides, very close to the roadway edge. At the time the

road was field inspected, wild roses were blooming along the edge. Farm houses, fences covered with roses, honeysuckle, and wildflowers and wooded areas are along this road. The road goes through Ten Mile Creek as a ford.

Criteria: The road is located in an area where agriculture predominates. It is a narrow road clearly intended for local use and has a very low volume of traffic. The road is an alignment of high historic significance. The accident history does not suggest unsafe traffic conditions. For the three-year period between 1989 and 1991, only three accidents were reported for the entire stretch of road between Clarksburg Road (MD 121) and Barnesville. The road is needed for local access only and not for part of the travel network.

Significant Features: This historic alignment, the grades, the roadway edges, the way this road fits into the terrain, the enclosed feel of the nearby trees and vegetation, and the ford.

Rustic Roads Network: This road connects from the east with R-2 West Old Baltimore Road and crosses Peach Tree Road, which is a road on the Council's interim list for consideration as a rustic road, and ends at Barnesville Road, which is also on the Council's interim list.

Master Plan of Highways Designation:

Exceptional Rustic E-1

Right-of-way, 80 feet

Frederick Road (MD 355)

Frederick Road (MD 355) is a very old road with a historic alignment. The road is shown as a stage road on the 1865 Martenet and Bond's map of Montgomery County. Frederick Road is part of the Way West that is commemorated in Montgomery County by the Madonna of the Trail statue in the Bethesda Central Business District. In the lower part of the County, the road is a major transportation artery and has been expanded and has lost any semblance of its original character. The section of roadway between Old Hundred Road (MD 109) and the County line is the heart of the Hyattstown Historic District and retains the character of a narrow road with buildings very close to the roadway edge. This road is approximately 0.38 miles long.

Description: This short section of road is paved approximately 22 feet wide with asphalt and has no drainage provisions. The roadway edge is level on both sides, with mature trees. The road has an enclosed feel both because of the trees and because it goes through a historic district with residences very close to the roadway edge. The road has utilities on both sides. It has an asphalt sidewalk on one side and the roadway grade itself is very steep.

Criteria: The road is located in an area where historic features predominate. It is a narrow road. Today it is a State highway and carries traffic between Montgomery County and Frederick County. The Interstate

Highway I-270 is immediately to the west of this location and carries most of the interstate traffic. When the connection with I-270 is made at Urbana in Frederick County, we expect that more of the intercounty traffic will use I-270. The Clarksburg Master Plan encourages the use of I-270 instead of this section of MD 355.

The accident history does not suggest unsafe conditions. Two accidents were reported in the three-year period between 1989 and 1991. The 1990 traffic volume map of MCDOT does not show a traffic volume for this portion of Frederick Road. The portion between Comus Road and Old Hundred Road (MD 109) has an average daily traffic volume of 9,200.

Significant Features: The roadway setting, as it goes through the historic district, and the connection between the road and the adjacent houses constitute the significant features of this road.

Rustic Road Network: This road intersects R-1 (Old Hundred Road) and is close to R-6 (Hyattstown Mill Road). All three roads are associated with the Hyattstown historic district.

Master Plan of Highways Designation:

Rustic R-3

Right-of-way, 80 feet

Hawkes Road

Hawkes Road is approximately 1.06 miles long, running in a northwest direction from Ridge Road, connecting Ridge Road (MD 27) and Stringtown Road. The road is intersected by Piedmont Road entering from the south at a "T" intersection. That portion of the road between Ridge Road and Piedmont Road is the boundary of the Clarksburg Master Plan Study Area; the remaining portion, between Piedmont Road and Stringtown Road, is within the RDT area of the Functional Master Plan for the Preservation of Agricultural and Open Space in Montgomery County.

Description: The section of Hawkes Road being considered as part of the Clarksburg Master Plan is between Piedmont Road and Ridge Road. The roadway paving is approximately 20 feet, with an asphalt curb on the west side and a slight gravel shoulder on the east. The road crosses a small stream and has a guard rail along the side of the road at the crossing. The roadway edge is level and open with views to Cedar Grove Historic District in one direction and to the extension of Hawkes Road in the other. Overhead utilities with wood poles are on both sides of the road. The adjacent land on the west side is a commercial nursery and two new houses. A farm is on the east side.

Criteria: The road is located in an area where natural or agricultural features predominate. The adjacent area is private conservation or is recommended for rural, residential use. It is a narrow road and is intended predominantly for local use. The traffic volumes are so low that they have not been recorded and made a part of the County's annual average daily traffic

map. Volumes appear to be low enough not to significantly detract from the rustic character of the road. The road has natural features along one side and farm fields and rural landscape on the other. The road, when traveling towards Ridge Road, highlights the historic landscape of the Cedar Grove Historic District. The accident history does not suggest unsafe conditions. One accident was reported for the three-year period 1989-1991. The rustic road classification will not impair the function or safety of the roadway network.

Significant Features: The significant feature of the road is the relationship between the road and the view of Cedar Grove Historic District, the character of the land use through which it passes, the small stream that the road crosses, and the rural view to the northwest as Hawkes Road continues over a hill. No outstanding vegetation was identified during the field check, which was done in April 1993.

Rustic Road Network: This road connects the historic district of Cedar Grove and Piedmont Road and continues into the Agricultural Reserve.

Master Plan of Highways Designation:

Rustic R-4

Right-of-way, 70 feet

Environmental Plan

Clarksburg Environmental and Water Resources Study Analysis

Environmental concerns have been a major consideration during the Master Plan process for Clarksburg and the Hyattstown Special Study Area. To better understand the environmental characteristics of the Clarksburg Study Area, the Montgomery County Planning Department funded an environmental study in 1990 which included the following objectives:

- To identify environmentally sensitive areas.
- To evaluate existing water quality conditions in the area contributing to Little Seneca Lake.
- To compare existing water quality conditions with future conditions under different land use scenarios.
- To identify potential problem areas for groundwater, water quantity and water quality.
- To identify mitigation measures to address potential problem areas.

The environmental study, entitled "Clarksburg Environmental and Water Resources Study" by Greenhorne & O'Mara, is available at the M-NCPPC Information Counter. The public may review it in the Environmental Planning Division or purchase it for \$20.00 at the Information Counter. Due to the length of the final report and its cost, this section summarizes the basic elements of the study and its relationship to the Master Plan land use recommendations. It should be pointed out that the environmental staff also used other documents and resources in making the land use recommendations.

Report Content

The Environmental and Water Resources Study fulfilled the report purpose by completing the following tasks:

- Basic data collection, digitization, and delivery of the data in a computer format (Geographic Information System).
- Groundwater modeling (DRASTIC analysis).
- Water quality and quantity analysis (HSPF modeling and NPS pollution modeling).
- Analysis of Best Management Practices (BMPs) for stormwater management.

The Environmental and Water Resources Study was a significant part of the overall environmental analysis completed during the Master Plan process.

Existing Environmental Conditions

The Environmental and Water Resources Study analyzes constraints and opportunities utilizing parameters such as floodplains, slopes, soils and wetlands. The Planning Department staff used these maps to develop the early land use options. As much as possible, the Clarksburg Master Plan effort focused on avoiding development in environmentally sensitive areas and channeling development into those areas that are more environmentally resilient. The composite constraints and opportunities map became the base map for alternative land use considerations. By receiving the Study data in a computerized format, the Planning Department got a head start with its Geographic Information System (GIS) program. The Study also generated a wetlands map, which was combined with the latest data from the Maryland Department of Natural Resources to produce a comprehensive wetlands database for the GIS system.

The second step of the Environmental and Water Resources Study was to inventory environmental features, which included field verification for accuracy and to obtain information about current conditions. Significant wetlands were identified through aerial photos; in some cases, the delineation was adjusted after field visits. Current environmental data on flora and fauna was collected along two transects (one each for Ten Mile Creek and Little Seneca Creek). This information will be useful in preparing the Clarksburg Wetland Management Plan as well as in reviewing actual development projects.

Some limited aquatic sampling was done in Ten Mile Creek and Little Seneca Creek. Their sampling results are in agreement with earlier sampling done by the Maryland Department of Natural Resources and more recent sampling done by citizen volunteers and Planning Department staff. Ideally, this type of effort should continue for a longer time throughout the Study Area. However, funding constraints restricted the activity to a limited time and area. The collected data is, in a broad sense, representative of the entire basin and the aquatic sampling will provide useful background information.

The Environmental and Water Resources Study also completed additional floodplain mapping for five minor tributary streams in the vicinity of the Town Center. The maps will be used by Planning Department staff in the approval of subdivision plans. M-NCPPC has produced 100-year floodplain mapping for major streams in the Seneca basin since the early 1970's. Theoretically, new maps are needed every time there is a change in the land use plan. However, new regulations and guidelines provide a margin of safety that renders extensive re-delineation unnecessary. For most purposes, the 100-year floodplain maps delineated from the previous Master Plan should be valid and will be used to regulate development.

EPA has designated a sole source aquifer which underlays parts of Montgomery, Frederick, Howard, and Carroll Counties. A "sole source" designation is used to describe an aquifer that serves as the population's only available form of drinking water. The entire Clarksburg Study Area falls within this designated area. Groundwater analysis was considered an important planning tool to determine what the effects of development would be on the sole source aquifer. Most groundwater modeling is expensive and more detailed than needed for master planning, so this study chose the DRASTIC analysis as a surrogate for groundwater modeling. Using simple techniques developed by the National Water Well Association, it identifies potential groundwater pollution problems. The model indicated that most of the sensitive areas to groundwater contamination in Clarksburg were located in stream buffers. The most sensitive groundwater contamination areas outside of stream buffers were included in the Special Protection Area designated in the Master Plan. Although not every recharge area is identified by this analysis, the DRASTIC model is suitable for master planning purposes. The staff also had numerous discussions on this subject with representatives from EPA, Maryland Geological Survey, and staff at Carroll County.

Analysis of Land Use Options

The Environmental and Water Resources Study collected existing water quality and quantity data and used two models to compare alternative land use scenarios to existing conditions.

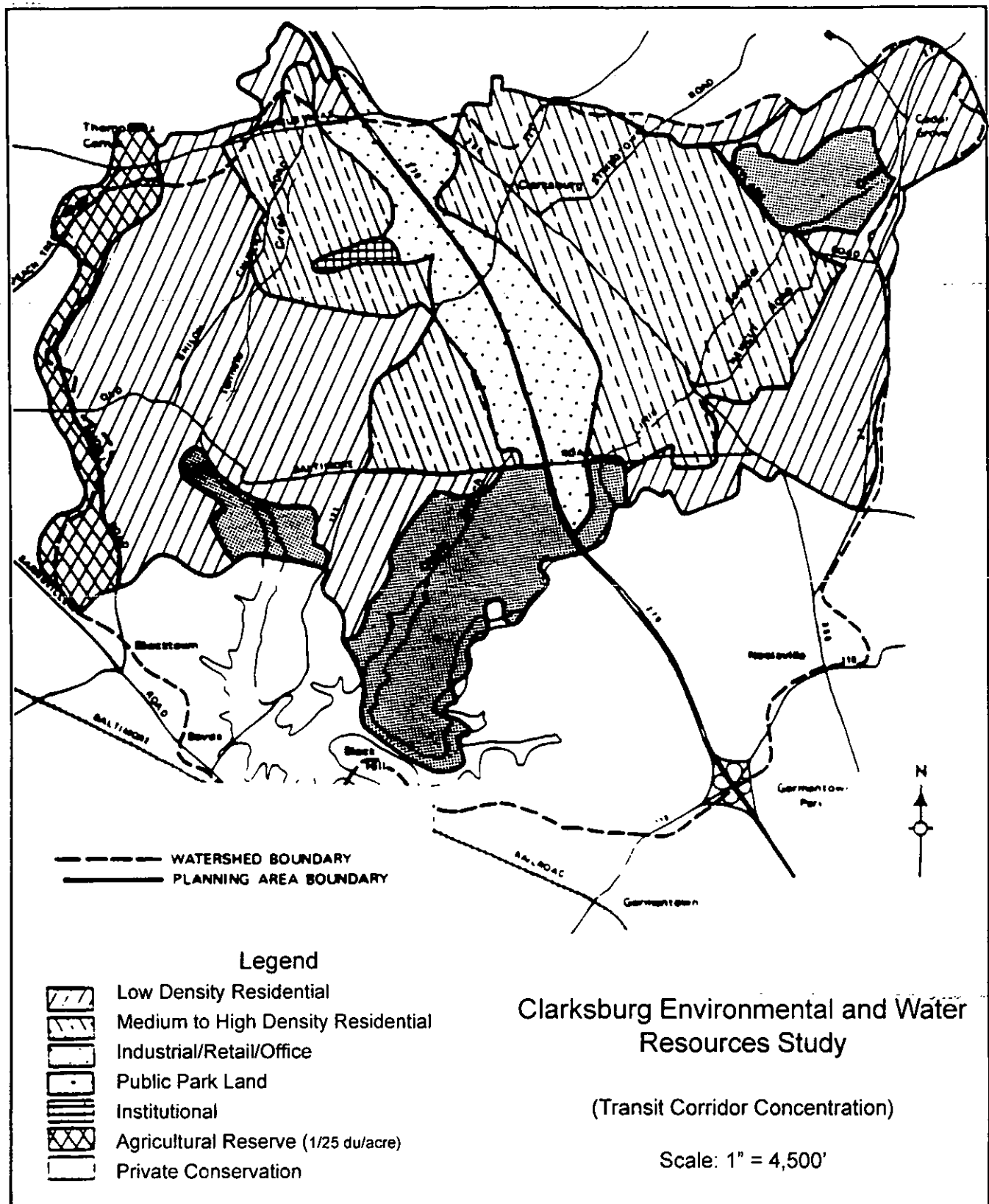
A continuous hydrologic simulation model (HSPF), was the best modeling tool readily available that allowed staff to evaluate proposed land uses against their expected effects on parameters with State water quality standards, as well as important indicators like runoff rates, nutrient and sediment loads and biochemical oxygen demand.

Three runs were made, one for existing conditions and two distinct land use alternatives (see Figures 12 and 13). The model results can be used for relative comparisons of land uses, but are not accurate enough for judging absolute pollutant levels.

In both alternatives, the forest cover was set at 26 percent, based on the assumption that all stream valley buffers would be completely forested. (The stream valley buffers are not, in fact, completely forested. However, the County's new tree legislation will help in achieving this objective.) The results show that

Land Use Schematic – Alternative 1

Figure 13



both options would meet most of the state's standards for Use IV waters, with some violations for temperature standards in certain stream reaches. The Master Plan designate these reaches and their drainage areas as Special Protection Areas.

A simpler screening analysis, the NPS model, was developed to extrapolate the results of the HSPF model to later land use scenarios. This was used to evaluate the Transit Corridor Concentration (TCC) Option and the Suburban Pattern with Transit Option. The Approved and Adopted Land Use Plan is a refined version of these options. This model projected similar parameters as HSPF, but also included trace metals. These parameters were examined in order to give a more complete picture of the effects of urbanization on water quality.

Model results showed that all land use options would increase water temperature, urban pollutant loadings, and runoff volumes and rates above existing levels. The TCC Option indicated relatively higher nutrient loadings due to the assumption that there would be more agricultural land. (See discussion on model limitations.) The TCC Option also showed lower toxic chemical and metals concentrations entering the Little Seneca Lake compared to the other land use scenarios. As a result of this modeling effort, planning staff focused on the TCC Option as the preferred land use option and began to examine mitigation of unavoidable environmental impacts.

Potential Mitigation

For the most part, the Environmental and Water Resources Study modeling efforts dealt with land use changes without considering mitigation. The approach which the Clarksburg Master Plan takes towards its environmental setting is to avoid impacts through adoption of land use alternatives that offer protection and, when unavoidable impacts are anticipated, to mitigate to the greatest extent practicable. Therefore, staff also asked that the Study look at what reductions in pollutant loadings could be obtained with appropriate stormwater management (SWM) where development is anticipated. In response to suggestions from the Clarksburg Citizens Advisory Committee, the Planning Department asked them to especially focus on identifying sites for regional or "shared" best management practices (BMPs) in selected areas to control runoff from adjacent areas planned for significant development.

There are several justifiable criticisms about the methodology, manner, and implementation of BMPs. Many criticisms stem from earlier poor planning efforts in siting and designing regional stormwater management facilities. The Study proposes 14 "good to excellent potential" shared SWM facility sites. Using available data at a planning scale level, the Study has effectively screened out environmentally sensitive areas, such as forests and wetlands, as well as overly large drainage areas, so that the proposed BMPs are realistically prioritized. More detailed engineering studies and assessment by County staff, as well as a state permit, are needed before a shared facility can be implemented.

Model Limitations

Much of the Environmental and Water Resources Study's work used mathematical models. All models are subject to limitations which must be kept in mind when the results are evaluated. For instance, the water quality models did not include the effects of any agricultural Best Management Practices (BMPs) other than conservation tillage (primarily no-till practices). Both the NPS and the HSPF model considered a worst-case scenario where agriculture's water quality effects are largely unmitigated, thus inflating the projected nutrient loads. These assumptions should be considered before judging the land use recommendations in the Master Plan.

With the large lot zoning proposed in the Master Plan, more farmers will probably join the County's agricultural preservation program, which requires a Montgomery County Soil and Water Conservation District (MSCD) approved soil conservation plan. This Plan would require appropriate conservation practices for each site, including any needed erosion and sediment practices, animal waste management, and stabilized waterways. According to MSCD, about 56 percent of the agricultural acreage in the County has a conservation plan. The BMPs associated with crop management are very cost-effective and can save the farmer enough money through reduced fertilizer, pesticide applications, and irrigation costs that they become attractive, especially with the government's cost-share programs. It is expected that these BMPs will become more prevalent and serve to improve water quality in the Ten Mile Creek watershed beyond its current "good" level.

Another limitation is found in the use of the HSPF model. This model was an adaptation of a model used in an earlier study. At the time, Seneca Creek at MD 28 was used for the calibration and Little Seneca Lake had not been built. Due to limited funds, no additional water quality monitoring station could be set up and or new calibration could be done. However, considering the scope of the analysis, in staff's professional judgment, the results of the HSPF model runs are useful for comparing water quality impacts of alternative land use options.

Finally, the NPS model likely underestimated pollutant removal in the mitigation analysis of the shared stormwater management facilities. The model calculates pollutant removal efficiencies for ponds as a percentage of the average pollutant load reaching the pond. In this model, the pond only traps a fraction of the load for a homogeneous sub-area; but in reality, the pond would be located to trap runoff from the high density land uses clustered within a sub-area, while lower density uses that produce less pollutants would not drain to the pond. Thus, the shared facilities will be situated to catch the most polluted runoff, but the model cannot divide the sub-areas into small enough land use blocks to reflect this.

Conclusion

The Environmental and Water Resources Study is just one component of the evaluation and research that was done to plan for maintenance of a healthy ecosystem in Clarksburg. Of the early land use options evaluated in the Study, the Transit Corridor Concentration (TCC) Option was evaluated most favorably. In addition to Study findings, the TCC Option has many more advantages in terms of overall environmental goals (such as more compact road networks, which involve less imperviousness and detriment to air quality, better energy conservation through concentration of density near transitway, and increased preservation of other natural resources like trees and wetlands).

The Approved and Adopted Land Use Plan allows more development than the TCC option to help achieve housing and economic development goals. Some land use recommendations, like location of Site 30 or the Town Center, were based on other planning considerations recognizing fully that negative impact will have to be mitigated. The Plan includes a detailed discussion of these mitigation strategies.

Some people believe that spreading moderate intensity development throughout the entire Clarksburg Study Area may be environmentally acceptable. In the Planning Board's judgment, it may have a severe negative impact on Ten Mile Creek but will be tested in the area east of Ten Mile Creek due to housing and employment needs. Ten Mile Creek has low base flow, shallow depth to bed rock, and soil that does not have the capacity to assimilate higher density runoff. It also has an expansive forest cover. By comparison, Little Seneca Creek has a larger base flow and more pervious soil with a greater capacity to absorb runoff. It is envisioned that Little Seneca Creek and the developed portions of Ten Mile Creek will be afforested and will undergo some stream restoration through development to help re-naturalize the watershed.

The Study, with support from County, State, and federal agencies, represents the best available technical documentation produced for the development of any master plan to date. One may disagree with interpretation of the Study's results but the technical information provided is factual and accurate commensurate with the resources allocated to the effort.

Study Findings and Master Plan Response

Table 9

The Environmental and Water Resources Study Results and Conclusion	Master Plan Response
<p>Study identified environmental constraints from existing published data and aerial photos, as well as field data (primarily wetlands, floodplains, and steep slopes).</p>	<p>Initial land use plans were formulated to preserve stream valley buffers. These will include steep slopes, floodplains, and most wetlands, as well as some areas included to preserve trees and protect headwaters and adjacent steep slope areas.</p>
<p>Environmental inventory showed good diversity of floral and faunal species. The largest habitat (by acreage) is found along stream valleys in all three sub-watersheds (Little Seneca Creek, Ten Mile Creek, and Cabin Branch) to Little Seneca Lake. The other main habitat is upland hardwood forests, found along hillsides and high areas. The Ten Mile Creek watershed has the most upland hardwood forest acreage.</p>	<p>Bottomland hardwood forests will be preserved via stream buffers. The most extensive areas of upland hardwood forests are in the Ten Mile Creek area, which will largely consist of rural, low density zoning to take development pressure off the large contiguous forested areas outside the stream buffer corridors.</p>
<p>Field data and aquatic sampling showed high sediment accumulation in Little Seneca Creek, whereas Ten Mile Creek was relatively free of sediment deposition. The Study concluded that Ten Mile Creek supports a more diverse benthic (stream bottom) macroinvertebrate population than Little Seneca Creek, based on this and slight differences in diversity indices.</p>	<p>The Master Plan recommends low density zoning for the west side of Ten Mile Creek to continue the rural land use patterns that so far have preserved healthy stream conditions that support aquatic life. The areas of Ten Mile Creek slated for development are targeted for additional mitigation measures, such as a development limit on industrial sites and expanded green space on the residential portion. All streams will benefit from the stream buffers that will be implemented through the regulatory development process.</p>
<p>The groundwater pollution predictor method (DRASTIC) used in the Study indicated that the areas most sensitive to groundwater contamination are stream valleys.</p>	<p>Most groundwater recharge areas are on slopes adjacent to streams, which will be preserved in stream valley buffers, which will be expanded to include the highest risk areas identified by DRASTIC analysis. Recharge areas in Little Seneca Creek and Cabin Branch that do not fall in stream buffers will be covered by special development guidelines to be developed later.</p>

Study Findings and Master Plan Response (cont.)

Table 9

The Environmental and Water Resources Study Results and Conclusion	Master Plan Response
<p>By comparing existing land use to several urban land use scenarios, water quality modeling (using HSPF and NPS models) indicated that agricultural pollutants, such as sediment and nutrients, would decrease as a watershed was urbanized, but urban pollutants (grease, oil trace metals, and toxic chemicals) would increase. Also, streams would experience lower baseflow, higher storm runoff rates and velocities, and higher water temperatures as the watershed urbanized. Ten Mile Creek would experience moderate to severe impacts from runoff increase under the low density residential zones proposed in the Suburban Pattern with Transit option. By contrast, Little Seneca Creek and Cabin Branch both were predicted to have only slight increases in runoff, even under higher densities than either the staff's land use plan (Transit Corridor Pattern option) or the Suburban Pattern option.</p>	<p>The recommended land use plan limits these impacts as much as possible in the areas where development is necessary to meet Clarksburg's and the County's needs. The land use plan reduces urban pollutants by emphasizing mass transit and grouping higher density land uses into areas easily served by the existing and proposed road infrastructure. This option also provides for more tree retention and open space, and less imperviousness than any other option considered. Finally, this Plan is especially responsive to protecting the environmental features of the Ten Mile Creek watershed, where there is more upland forest, a healthier aquatic habitat, and lower and less constant baseflow, by keeping much of the area in agricultural open space. Agricultural pollutants are expected to stabilize, and eventually decrease, as permanent farmers using Soil Conservation Service – approved best management practices replace tenant farmers.</p>
<p>Water quality modeling projected moderate to severe thermal impacts to some stream reaches in Little Seneca Creek and Ten Mile Creek, which might disrupt cold-water fish habitats.</p>	<p>The Master Plan recommends amending the Environmental Guidelines for Subdivision review to allow more careful environmental review in Special Protection Areas of Clarksburg. This includes areas expected to have thermal impacts from development. The County's water quality review process, expected to be adopted in 1994, will also assist in assessing effective BMP designs.</p>
<p>The environmental impacts of increased stormwater runoff and pollutants can be reduced through mitigation by stormwater management. Stormwater management should combine on-site controls, especially for water quality treatment, with shared facilities where individual facilities are not practical. After screening for suitable combinations of moderate-high density land use, little wetland or forest impact and drainage area size, 22 potential regional stormwater management locations were identified.</p>	<p>The Master Plan calls for various environmental strategies to be implemented through the regulatory process that will mitigate development's effects. Setting aside undisturbed stream buffers, reforesting open areas along streams, and designing, constructing, and maintaining environmentally sensitive stormwater management facilities are all considered mitigation measures. The Plan supports state-of-the-art stormwater management, and suggests that the sites identified as potential shared stormwater management facilities be considered for implementation by the County's Department of Environmental Protection during the regulatory review process.</p>

Water Use Classes

The Maryland Department of the Environment applies distinct designated water uses for the surface waters of the state, each having a specific set of standards. The designated water uses and their standards are:

A. USE I: WATER CONTACT RECREATION & PROTECTION OF AQUATIC LIFE

Waters which are suitable for: water contact sports, play and leisure time activities where the human body may come in direct contact with the surface water, fishing, the growth and propagation of fish (other than trout), other aquatic life and wildlife, agricultural water supply, and industrial water supply.

Criteria for Use I waters:

- a. Bacteriological – there may not be any source of pathogenic or harmful organisms in sufficient quantities to constitute a public health hazard. A public health hazard will be presumed when:
 - i. fecal coliform density exceeds a log mean of 200 per 100 ml based on minimum of 5 samples taken over 30 days;
 - ii 10 percent of total number of samples exceed 400 per 100 ml; or
 - iii except when a sanitary survey approved by the Maryland Department of the Environment discloses no significant health hazard, (i) and (ii) do not apply.
- b. Dissolved Oxygen – may not be less than 5.0 mg/liter at any time.
- c. Temperature – maximum temperature outside the mixing zone may not exceed 90 degrees F (32 degrees C) or the ambient temperature of the surface waters, whichever is greater. A thermal barrier which adversely affects aquatic life may not be established.
- d. pH - Normal pH values may not be less than 6.5 or greater than 8.5.
- e. Turbidity – may not exceed levels detrimental to aquatic life. Turbidity in the surface water resulting from any discharge may not exceed 150 units at any time or 50 units as a monthly average.
- f. Toxic Substances – all toxic substance criteria to protect fresh water and estuarine and saltwater aquatic organisms, and the wholesomeness of fish for human consumption apply in fresh, estuarine and salt waters. (See COMAR 26.08.02.03-3.)

B. USE I-P: WATER CONTACT RECREATION, PROTECTION OF AQUATIC LIFE, AND PUBLIC WATER SUPPLY

Waters which are suited for all uses identified in Use I and use as a public water supply.

Criteria for Use I-P waters:

- a. The criteria for Use I waters (a)-(e)
- b. Toxic Substances – all toxic substances criteria to protect fresh water aquatic organisms and to protect public water supplies and the wholesomeness of fish for human consumption apply.

C. USE II: SHELLFISH HARVESTING WATERS

None in Montgomery County

D. USE III: NATURAL TROUT WATERS

Waters which are suitable for the growth and propagation of trout and which are capable of supporting self-sustaining trout populations and their associated food organisms.

Criteria for Use III waters:

- a. Bacteriological – same as Use I waters
- b. Dissolved Oxygen – may not be less than 5.0 mg/liter at any time with a minimum daily average of not less than 6.0 mg/liter.
- c. Temperature – maximum temperature outside the mixing zone may not exceed 68 degrees F (20 degrees C) or the ambient temperature of the surface water, whichever is greater. A thermal barrier that adversely affects aquatic life may not be established.
- d. pH – same as Use I waters
- e. Turbidity – same as Use I waters
- f. Total Residual Chlorine (TRC) – except as provided in COMAR 26.08.03.06, the Department may not issue a permit allowing the use of chlorine or chlorine compounds in the treatment of wastewater discharging to Use III and III-P waters.
- g. Toxic Substances – all criteria to protect fresh water aquatic organisms and the wholesomeness of fish for human consumption apply.

E. USE III-P: NATURAL TROUT WATERS AND PUBLIC WATER SUPPLY

Waters which include all uses identified for Use III waters and use as a public water supply.

Criteria for Use III-P waters:

- a. The criteria for Use III waters (a)-(f)
- b. Toxic Substances – all toxic substances criteria to protect fresh water aquatic organisms and to protect public water supplies and the wholesomeness of fish for human consumption apply.

F. USE IV: RECREATIONAL TROUT WATERS

Waters which are capable of holding or supporting adult trout for put and take fishing and which are managed as a special fishery by periodic stocking and seasonal catching (cold or warm waters).

Criteria for Use IV waters:

- a. Bacteriological – same as Use I waters
- b. Dissolved Oxygen – same as Use I waters
- c. Temperature – maximum temperature outside the mixing zone may not exceed 75 degrees F (23 degrees C) or the ambient temperature of the surface water, whichever is greater. A thermal barrier that adversely affects aquatic life may not be established.
- d. pH – same as Use I waters
- e. Turbidity – same as Use I waters
- f. Toxic Substances – all toxic substance criteria to protect fresh water aquatic organisms and the wholesomeness of fish for human consumption apply.

G. USE IV-P: RECREATIONAL TROUT WATERS AND PUBLIC WATER SUPPLY

Waters which include all uses identified for Use IV waters and use as a public water supply.

Criteria for Use IV-P waters:

- a. The criteria for Use IV waters (a)-(e)
- b. Toxic Substances – all toxic substances criteria to protect fresh water aquatic organisms and to protect public water supplies and the wholesomeness of fish for human consumption apply.

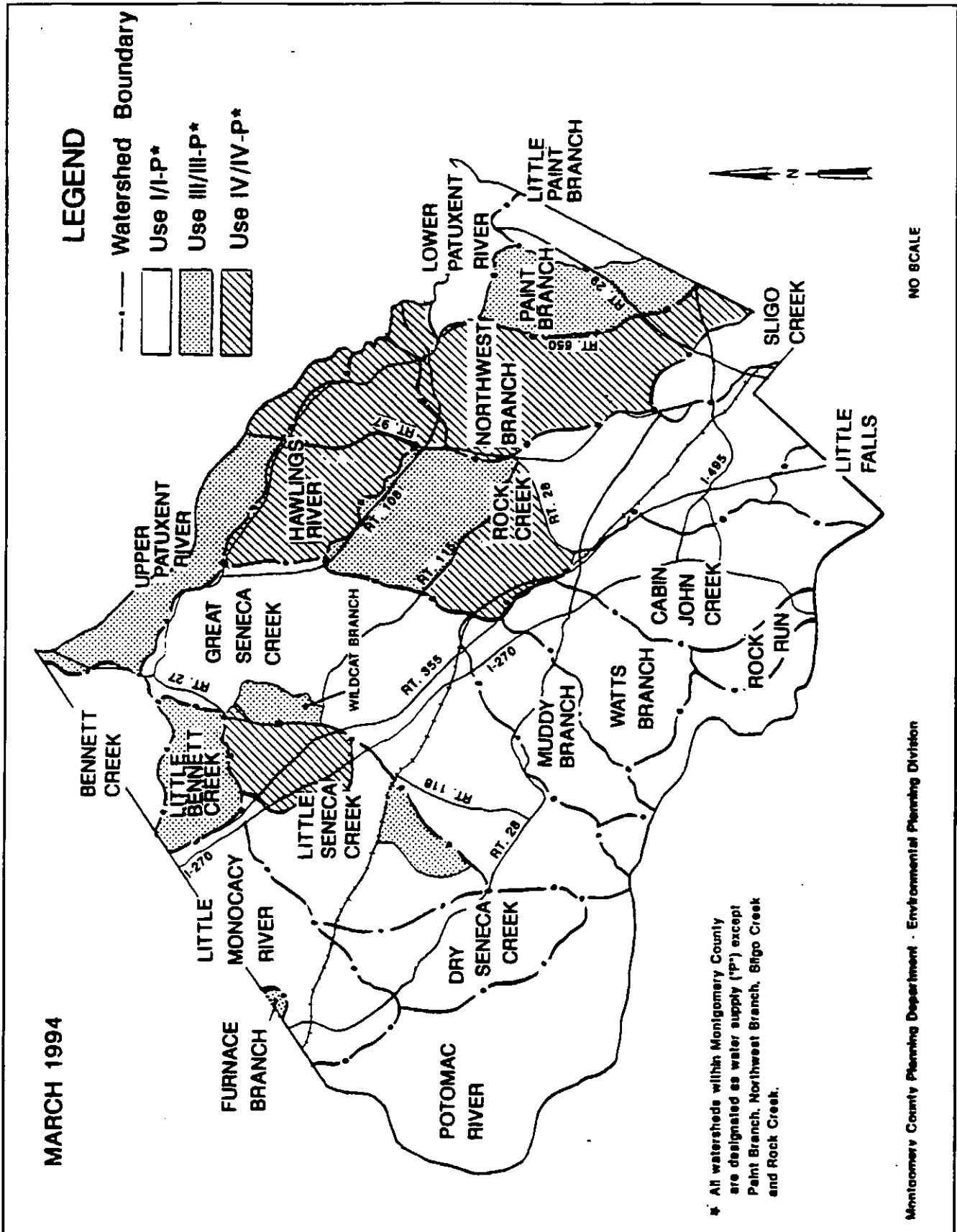
COMAR 26.08.02.04 Anti-Degradation Policy

- A. Certain waters of this state possess an existing quality which is better than the water quality standards established for them. The quality of these waters shall be maintained unless:

1. The Department determines a change is justifiable as a result of necessary economic or social development, and
 2. A change will not diminish uses made of, or presently possible, in these waters.
- B. To accomplish the objective of maintaining existing water quality:
1. New and existing point sources shall achieve the highest applicable statutory and regulatory effluent requirements, and
 2. Nonpoint sources shall achieve all cost effective and reasonable best management practices for nonpoint source control.
- C. The Department shall discourage the downgrading of any stream from a designated use with more stringent criteria to one with less stringent criteria. Downgrading may only be considered if:
1. The designated use is not attainable because of natural causes,
 2. The designated use is not attainable because of irretrievable man-induced conditions, or
 3. Controls more stringent than the effluent limitations and national performance standards mandated by the Federal Act, and required by the Department, would result in substantial and widespread economic and social impact.
- D. The Department shall provide public notice and opportunity for a public hearing on the proposed change before:
1. Permitting a change in high quality waters; or
 2. Downgrading any stream use designation.
- E. Water which does not meet the standards established for it shall be improved to meet the standards.

State Water Use Designations for Montgomery County Streams

Figure 15



State Water Class Uses for Montgomery County Streams

Table 10

Use	Waters	Limits
Use I	(*) Little Paint Branch (*) Sligo Creek (*) Rock Creek	Below MD 28
Use I-P	(*) Patuxent River and all tributaries except those designated below as Use III-p or IV-p (*) Potomac River and all tributaries except those designated as Use III, II-p IV, or IV-p (*) Little Seneca Creek and Little Seneca Lake (*) Little Monocacy River (*) Bennet Creek (*) Great Seneca Creek (*) Little Seneca Creek Cabin Branch Ten Mile Creek (*) Dry Seneca Creek	Upstream of Rocky Gorge Between the lake and the B&O Railroad Bridge and below confluence of Bucklodge Branch including Bucklodge Branch Above confluence with Little Seneca Lake Above confluence with Little Seneca Lake
Use II	None	
Use III	(*) Paint Branch and all tributaries (*) Rock Creek and all tributaries (*) North Branch Rock Creek and all tributaries	Upstream of Capital Beltway (I-495) Upstream of Muncaster Mill Road Upstream of Muncaster Mill Road
Use III-P	(*) Little Bennett Creek and all tributaries (*) Furnace Branch (*) Patuxent River and all tributaries (*) Little Seneca Creek and all tributaries (*) Wildcat Branch of Great Seneca Creek	Upstream of MD 355 Upstream of Triadelphia Reservoir Downstream of Little Seneca Lake between the B&O Railroad Bridge and the confluence with Bucklodge Branch Upstream of Great Seneca Creek

State Water Class Uses for Montgomery County Streams (cont.)*Table 10*

Use	Waters	Limits
Use IV	(*) Rock Creek and all tributaries	From MD 28 to Muncaster Mill
	(*) Northwest Branch and all tributaries	Road Upstream of East-West Highway (MD 410)
Use IV-P	(*) Patuxent River and all tributaries	Between Rocky Gorge and Triadelphia Reservoirs, including Triadelphia Reservoir
	(*) Little Seneca Creek and all tributaries	Upstream of Little Seneca Lake

Use Designation of Ten Mile Creek

Background Materials

The Planning Board held a Public Forum to seek comments on whether the designation of Ten Mile Creek as a Use I-P by the Maryland Department of the Environment rather than Use IV-P should be the basis for re-examining and modifying land use recommendations for the Ten Mile Creek Drainage Area. A summary of the public testimony is attached as well as a copy of the staff report to the Planning Board.

- A. **Letter from Planning Board to Montgomery County Council dated January 28, 1994 discussing the designation of Ten Mile Creek as a Use I-P rather than Use IV-P.**



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

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Montgomery County Planning Board
Office of the Chairman

January 28, 1994

The Honorable William E. Hanna, Jr.
President
Montgomery County Council
Stella B. Werner Council Office Building
100 Maryland Avenue
Rockville, MD 20850

Dear Mr. Hanna:

On January 6th, the Planning Board held a Public Forum to seek comment on whether the designation of Ten Mile Creek as a Use I-P by the Maryland Department of the Environment rather than Use IV-P should be the basis for re-examining and modifying land use recommendations for the Ten Mile Creek Drainage Area. A summary of the public testimony is attached as well as a copy of the staff report to the Board. Staff will forward a complete package of correspondence received on this matter under separate cover.

On January 27, the Planning Board discussed the testimony and considered whether the change should be the basis for reconsideration of the recommendations in the Planning Board (Final) Draft Plan.

The Planning Board did not reach consensus on this issue. Two of the members, Commissioner Baptiste and myself, continue to support the Draft Plan's land use recommendations for the Ten Mile Creek Drainage Area. Ten Mile Creek is a high quality cold water habitat and that fact is indisputable, regardless of the state use designation. I believe you will find in your review of the testimony that there is general agreement on this fact.

To help the PHED Committee better understand the many public policy issues that influence the recommended land use pattern for Ten Mile Creek, Commissioner Baptiste and I have included the draft language requested by the County Executive at the Public Forum and prepared by staff as an attachment to this letter.

Commissioners Ruthann Aron and Davis Richardson continue to have strong reservations about the land use pattern for Ten Mile Creek. Commissioner Aron stated that the change in use designation from IV-P to I-P only reinforces her commitment to a compromise residential land use pattern west of I-270. Commissioner Richardson expressed his belief that the Plan treats Ten Mile Creek

The Honorable William E. Hanna, Jr.

Page 2

January 28, 1994

in a manner that is out of proportion to its designation as a Use I-P and reiterated his concerns about the lack of environmental controls for proposed public use development on Site 30.

I have urged members of the Board to attend the PHED worksession on Ten Mile Creek to express their views and opinions. As always we look forward to working with you as the Draft Plan goes forward.

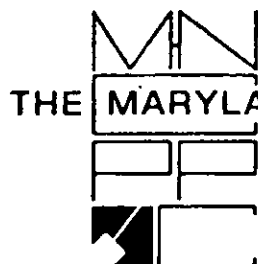
Sincerely,

A handwritten signature in cursive script that reads "Nancy M. Floreen".

Nancy M. Floreen
Acting Chair

NMF:md
Attachment

N:\TMCNMF.let



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

January 3, 1994

MEMORANDUM

TO: Montgomery County Planning Board

FROM: Environmental Planning Division
Community Planning Division

SUBJECT: Planning Board (Final) Draft Clarksburg Master Plan:
Background Materials for Public Forum on Use
Designation of Ten Mile Creek

The topic of the January 6 Public Forum is whether the fact that Ten Mile Creek is currently designated Use I-P by the Maryland State Department of the Environment rather than Use IV-P should be the basis for re-examining and modifying land use recommendations for the Ten Mile Creek Drainage Area. This review was requested by the County Council Planning, Housing, and Economic Development (PHED) Committee at a recent Clarksburg Master Plan worksession.

No other Master Plan issues are before the Planning Board at this time. Staff will respond to the Public Forum comments and make a recommendation to the Planning Board prior to the next scheduled County Council Worksession on the Master Plan (January 31).

Background

Throughout the Clarksburg Master Plan process, Ten Mile Creek has been referred to as a Use IV-P stream. This assumption is reflected in the Planning Board (Final) Draft Plan on page 138 where the Plan states:

Streams in the Little Seneca Lake watershed are designated as suitable for recreational trout populations (put-and-take, or periodic stocking and seasonal catching) by the Maryland Department of the Environment (Use IV-P) and have associated standards for temperature and chlorine. Water temperature must remain cool to keep this designation. (See Stream Designation Listing of Montgomery County Streams in the Technical Appendix.)

Also, the Technical Appendix for the Plan includes as Figure 14 a map showing Little Seneca Creek watershed as Use IV-P within the Clarksburg Study Area (see Attachment 1).

In November, while investigating a site on the Lake Churchill tributary in Germantown, the Planning Department staff found that not all tributaries to Little Seneca Lake are designated Use IV-P. Subsequent investigation revealed that above Little Seneca Lake, only Little Seneca Creek proper is currently designated Use IV-P in the Code of Maryland Regulations (see Attachment 2). All other tributaries, including Ten Mile Creek and Cabin Branch are designated Use I-P.

An analysis of legislative history reveals that in 1974 (in the Department of Natural Resources-Regulations) and again in 1978 (in the Code of Maryland Regulations), the state designated Little Seneca Creek and all its tributaries above Route 28 as "trout streams" with regard to fishing in the non-tidal waters of Maryland. In 1980, Department of Natural Resources built on these regulations, introducing the use designations as we know them today to protect fisheries from water pollution. The new regulations also modified the designations on many streams throughout the state that would be affected. At that time, a specific state coordinate point was incorporated into the listing for Little Seneca Creek and all its tributaries. This moved the Use IV designation considerably upstream, above the point where the Lake Churchill tributary joins the mainstem and downgrading a considerable length of the mainstem, including Cabin Branch and Ten Mile Creek.

According to the Maryland Department of the Environment (which has since been delegated the responsibility for water use designation), no evidence exists in the file regarding the reason for this change, nor is any testimony recorded for or against it. Apparently, this change went unnoticed by all local agencies and environmental groups alike. The coordinate point had no description of its location. All reports by any agency or consultant done since that time list Ten Mile Creek and Cabin Branch as Use IV streams. The "P" designation was added after the construction of the dam to reflect the fact that these areas drain to a public water supply.

RELATION OF CHANGE IN USE DESIGNATION TO CLARKSBURG MASTER PLAN LAND USE RECOMMENDATIONS FOR TEN MILE CREEK AREA

The Planning Board (Final) Draft Master Plan land use recommendations for Ten Mile Creek drainage area are shown in Attachment 3.

This land use pattern reflects the following Plan objectives:

- Create a land use pattern for the Town Center portion of the Ten Mile Creek area which balances community building objectives with environmental concerns (Page 50).
- Recommend a land use pattern west of Ten Mile Creek which is supportive of the Agricultural Reserve (Page 84).

- Recommend a land use pattern east of Ten Mile Creek which supports the continuation of the Ten Mile Creek as a significant environmental asset (Page 86).
- Provide general guidance in terms of future potential uses of County owned land (Page 88).

These objectives, especially the one relating to land use east of Ten Mile Creek, reflect environmental concerns based on studies done as part of the Master Plan process.

As noted in the Planning Board Draft Plan on page 139:

A year long field sampling and laboratory assessment of aquatic life will be completed in December, 1993 by the Montgomery County Planning Department. The study uses the EPA Rapid Bioassessment Protocol II to establish baseline information on biotic conditions as indicators of water quality. Preliminary results for Ten Mile Creek and Little Seneca Creek show that they continue to support a wide variety of aquatic life. There is no evidence of long-term damage from temperature impacts. The results confirm that the tributaries are functioning as healthy Use IV-P streams. Ten Mile Creek was found to have slightly more diverse and pollution-sensitive macroinvertebrates than Little Seneca Creek.

Staff studies, as well as those done by consultants during the Master Plan process, show that the stream is an excellent cold water habitat.

If it was known earlier in the Master Plan process that Ten Mile Creek was designated Use I-P, staff would certainly have worked with the State and Department of Environmental Protection to conduct the tests necessary to ascertain the appropriate designation. A critical piece of information that is missing from the State's point of view is continuous temperature monitoring during the summer. Random tests taken last summer have indicated temperatures within the proper range, but they were not continuous.

REVIEW OF PREVIOUS PLANNING BOARD WORKSESSION ON TEN MILE CREEK AREA

Attached is the packet prepared by staff as background to the Planning Board's September 17, 1992 discussion of the Ten Mile Creek Area.

The State of Maryland's current designation of Ten Mile Creek as Use I-P rather than use IV-P does not alter the basic conclusion of the staff report:

Staff is recommending that the Planning Board approve [a land use pattern], which emphasizes rural and open space land uses west of I-270. Concern about the environmental impacts of development on Ten Mile Creek is the basis for this

recommendation. As discussed later in this report, [allowing residential development east of Ten Mile Creek] does achieve public policy objectives concerning housing and the creation of additional TDR receiving areas. However, staff has concluded that the desirability of protecting Ten Mile Creek, a relatively fragile stream, from additional development impacts should be the most important public policy governing land use.

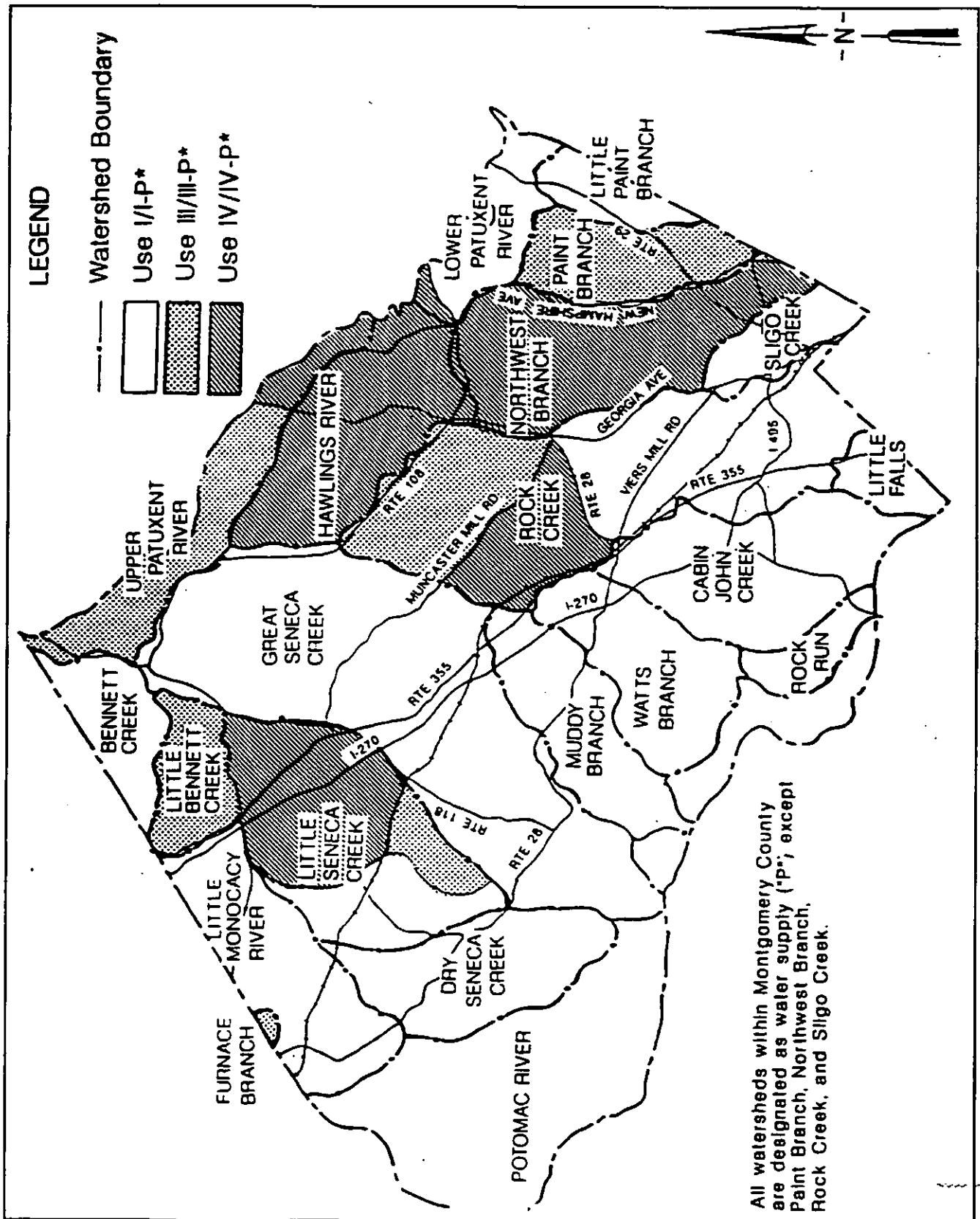
After a lengthy discussion of what the key public policy objectives should be in the Ten Mile Creek watershed, the Planning Board members voted 3-2 to endorse staff's recommendation.

LC:ss/b:tenmile/ss

Attachments

State Water Class Uses for Montgomery County Streams

Attachment 1



Supp. 4

Use	Waters	MCGS	Limits
M. SUB-BASIN 02-14-01: LOWER POTOMAC RIVER AREA			
(1) Use I-P: Tilghman Lake Reservoir		817/260	
(2) Use II: All estuarine portions of tributaries except Potomac River and tributaries		From 723.8/211.8 to 710.9/205.3	Above line from Smith Pt. to Simms Pt.
(3) Use III: None			
(4) Use III-P: None			
(5) Use IV: None			
(6) Use IV-P: None			
N. SUB-BASIN 02-14-02: WASHINGTON METROPOLITAN AREA			
(1) Use I-P: Potomac River and all tributaries except those designated below as Use III, Use III-P, Use IV, or Use IV-P		761.5/401	From MD/DC line to Frederick/Montgomery County line
(2) Use II: None			
(3) Use III:			
(a) Paint Branch and all tributaries		815.2/433.2	Above Capital Beltway (I-495)
(b) Rock Creek and all tributaries		764/475	Above Muncaster Mill Road
(c) North Branch Rock Creek and all tributaries		771.5/468	Above Muncaster Mill Road
(4) Use III-P: Little Seneca Creek and all tributaries		From 704/477.4 to 716/491.3	From the stream's confluence with Bucklodge Branch to the Baltimore and Ohio railroad bridge (see Regulation .03-3E(1) of this chapter)
(5) Use IV:			
(a) Rock Creek and all tributaries		From 769.2/451.1 to 764/475	From Rt. 28 to Muncaster Mill Road

WATER POLLUTION

26.08.02.08N

26.08.02.08O

ENVIRONMENT

Use	Waters	MCGS	Limits
(b) Northwest Branch and all tributaries		809/413	Above East-West Highway (Rt. 410)
(6) Use IV-P: Little Seneca Creek and all tributaries		719.2/497.4	

O. SUB-BASIN 02-14-03: MIDDLE POTOMAC RIVER AREA

(1) Use I-P: Potomac River and all tributaries except those designated below as Use III-P or Use IV-P	671/505.9	From Frederick/Montgomery County line to confluence with Shenandoah River
(2) Use II: None		
(3) Use III: None		
(4) Use III-P:		
(a) Tuscarora Creek and all tributaries	694/592	
(b) Carroll Creek and all tributaries	678.5/579.5	Above U.S. Route 15
(c) Rocky Fountain Run and all tributaries	681/546	
(d) Fishing Creek and all tributaries	689.2/609.2	
(e) Hunting Creek and all tributaries	698.5/625.5	
(f) Owens Creek and all tributaries	705.9/635.9	
(g) Friends Creek and all tributaries	697.2/689.1	
(h) Catoctin Creek and all tributaries	640.6/589.8	Above Alternate U.S. Route 40
(i) Little Bennett Creek and all tributaries	697/532	Above MD Route 355
(j) Furnace Branch	675/514	
(5) Use IV: None		
(6) Use IV-P:		
(a) Monocacy River and tributaries except those designated above as Use III-P	696/570	Above U.S. Route 40
(b) Catoctin Creek	640.6/538	Mainstem only, below Alternate U.S. Route 40

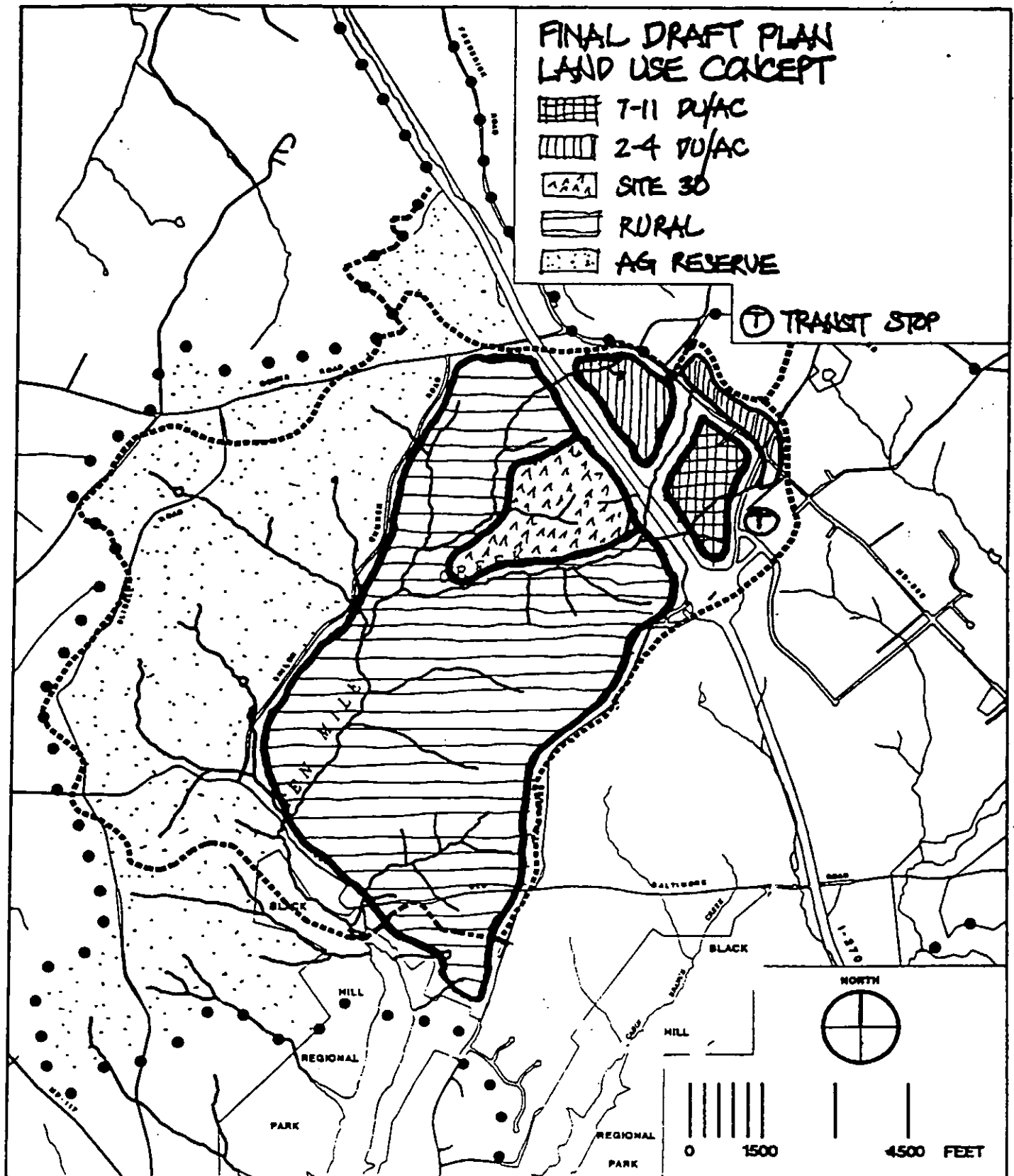
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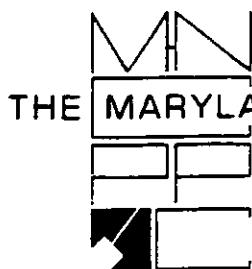
Ten Mile Creek Drainage Area

Attachment 3



B. Planning Board Staff Response on Use Designation

B



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

Agenda Date: September 17, 1992

Agenda Item: #23

September 14, 1992

MEMORANDUM

TO: Montgomery County Planning Board
FROM: Lyn Coleman, ^{Page 6}Coordinator, Community Planning Division
SUBJECT: Worksession #5: Preliminary Draft Clarksburg Master Plan and Hyattstown Special Study Area for Properties: Area West of I-270

PROPOSED AGENDA

The area west of I-270 includes the two analysis areas shown on page 2: the Cabin Branch Neighborhood and the Ten Mile Creek area.

The proposed agenda is as follows:

I. Overview of Opportunities and Constraints West of I-270

This will be an oral presentation by staff at the worksession and will include a brief slide show.

II. Presentation of Land Use Plan Options for West of I-270

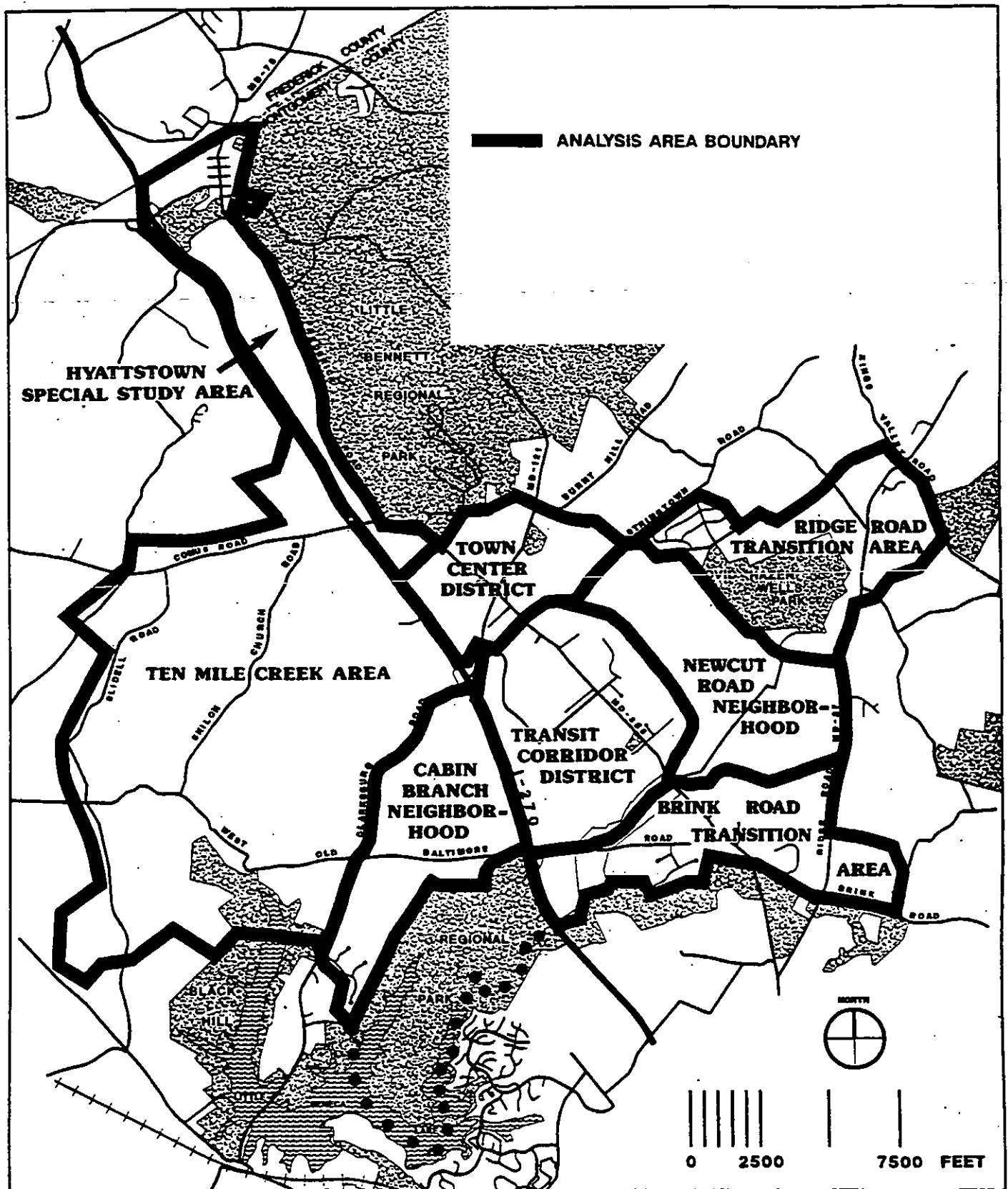
A. Options included in the Preliminary Draft Plan

1. Transit Corridor Pattern (see page 100 of Plan)
2. Suburban Pattern with Transit (see page 106 of Plan)

B. Modified options prepared by staff in response to Public Hearing testimony

Packet reference: ① - ⑥

Analysis Areas



Clarksburg Master Plan and Hyattstown Special Study Area

APPROVED AND ADOPTED JUNE 1994

III. Staff Analysis of Modified Land Use Plan Options

- A. Relationship to Master Plan Policies
- B. Relationship to County-wide Housing Needs
- C. Relationship to County-wide Employment Needs

Packet reference: (6) - (12)

IV. Discussion of Staff Recommendation: Modified Transit Corridor Pattern

Packet reference: (13)

V. Response to Public Hearing Testimony

Packet reference: (15)

PROPOSED REVISIONS TO WORKSESSION SCHEDULE AND TOPICS

The tentative schedule for the remaining worksessions is shown as Attachment 1. Staff has recently received an alternative development concept for the 670 acre Slidell/Shiloh Church properties west of Ten Mile Creek (see page 4). This concept is not part of the Public Hearing record. If the Planning Board wishes to discuss this proposal in any detail, an additional worksession will be necessary.

PRESENTATION OF THE CUMULATIVE EFFECT OF ALL PROPOSED REVISIONS TO DATE IN TERMS OF DEVELOPMENT YIELDS AND RECOMMENDED HOUSING MIX

Attachment 2 summarizes all the Planning Board recommended changes in terms of development yields.

Staff recommended changes for the Cabin Branch Neighborhood and Ten Mile Creek Area are also shown. The rationale for these changes is discussed in the analysis portion of the packet.

The recommended housing mix guidelines are included as Attachment 3. The changes being proposed for the Cabin Branch Neighborhood are consistent with the guidelines approved by the Board for the Newcut Road Neighborhood.

ATTACHMENT 1

PRELIMINARY DRAFT CLARKSBURG MASTER PLAN
AND HYATTSTOWN SPECIAL STUDY AREA

TENTATIVE WORKSESSION SCHEDULE

	<u>DATE</u>	<u>TOPIC</u>	<u>TIME</u>
#1	May 21	Planning Policies	Completed
#2	June 25	Town Center	Completed
#3	July 9	Environmental Overview Hyattstown Special Study Area	Completed
#4	August 3	Transit Corridor District Newcut Road Neighborhood Ridge Road Transition Area Brink Road Transition Area	Completed
#5	September 17	West of I-270 - Ten Mile Creek Area - Cabin Branch Neighborhood	Evening
#6	October 15	Hyattstown Special Study Area Transportation	To be determined
#7	Week of November 9	Phasing Concepts Historic Resources Environmental Plan Recommendations	To be determined
#8	December 8	Implementation Greenways/Parks Other Public Facilities	To be determined
#9	Week of December 14	Approval to Print Final Draft Plan	To be determined

Revised: 8/92

ATTACHMENT 2

**CUMULATIVE EFFECT OF PROPOSED PLANNING BOARD AND STAFF REVISIONS
IN TERMS OF DEVELOPMENT YIELDS AND RECOMMENDED HOUSING MIX***

<u>Analysis Area</u>	<u>Acres</u>	<u>Preliminary Draft Plan Dwelling Units</u>	<u>Staff Recommended Changes Dwelling Units</u>
Town Center District**	550	4,000	3,000
Transit Corridor**	980	3,800	3,100
Newcut Road Neighborhood**	1,060	4,620	4,000
Ridge Road Transition Area**	900	320	320
Brink Road Transition Area**	860	1,840	1,840
Cabin Branch Neighborhood	960	2,600	2,250
Ten Mile Creek Area***	3,600	340	340
TOTAL	8,910	17,520	14,850

* Densities include Moderately-Priced Dwelling Units (MPDU's).

** Changes reflect Planning Board direction at previous worksessions.

*** An alternative land-use pattern for this area is included in the packet. This pattern would increase the number of dwelling units by approximately 1,000.

Source: Community Planning Staff, September 1992

ATTACHMENT 3

SUMMARY OF RECOMMENDED PLANNING BOARD AND STAFF CHANGES TO
PRELIMINARY DRAFT RECOMMENDED HOUSING MIX GUIDELINESPreliminary Draft Plan

	<u>Multi-Family</u>	<u>Attached</u>	<u>Detached</u>
Town Center	30 - 50%	35 - 55%	5 - 15%
Transit Corridor	30 - 50%	25 - 35%	10 - 20%
Newcut Road Neighborhood	5 - 15%	55 - 65%	25 - 35%
Cabin Branch Neighborhood	5 - 15%	55 - 65%	25 - 35%

Staff Suggested Changes

	<u>Multi-Family</u>	<u>Attached</u>	<u>Detached</u>
Town Center*	25 - 45%	30 - 50%	10 - 20%
Transit Corridor:*			
Transitway	30 - 50%	40 - 60%	5 - 10%
MD 355	5 - 10%	20 - 40%	50 - 60%
Newcut Road Neighborhood*	10 - 20%	35 - 45%	45 - 55%
Cabin Branch Neighborhood	10 - 20%	35 - 34%	45 - 55%

* In accord with Planning Board direction at previous worksessions.

Source: Community Planning Staff, September 1992.

**AREA WEST OF I-270
OVERVIEW OF LAND USE OPTIONS AND STAFF RECOMMENDATION**

BACKGROUND

The Preliminary Draft Master Plan includes two land use plan options: Transit Corridor and Suburban Pattern with Transit. Each of these options presents a very different vision for the area west of I-270. A great deal of Public Hearing testimony focused on these two options. Many alternative ideas about how the area should develop were presented at the Public Hearing as well as after the Hearing.

To enable the Board to consider the alternative approaches raised at the Public Hearing, staff has prepared modified versions of both the Transit Corridor and Suburban Pattern with Transit Options. The modified versions are shown on pages ③ and ⑤.

Staff is recommending that the Board approve the Modified Transit Corridor Option, which emphasizes rural and open space land uses west of I-270. Concern about the environmental impacts of development on Ten Mile Creek is the basis for this recommendation. As discussed later in this report, the Modified Suburban Pattern with Transit does achieve public policy objectives concerning housing and the creation of additional TDR receiving areas. However, staff has concluded that the desirability of protecting Ten Mile Creek, a relatively fragile stream, from additional development impacts should be the most important public policy governing land use.

DISCUSSION OF LAND USE PLAN OPTIONS

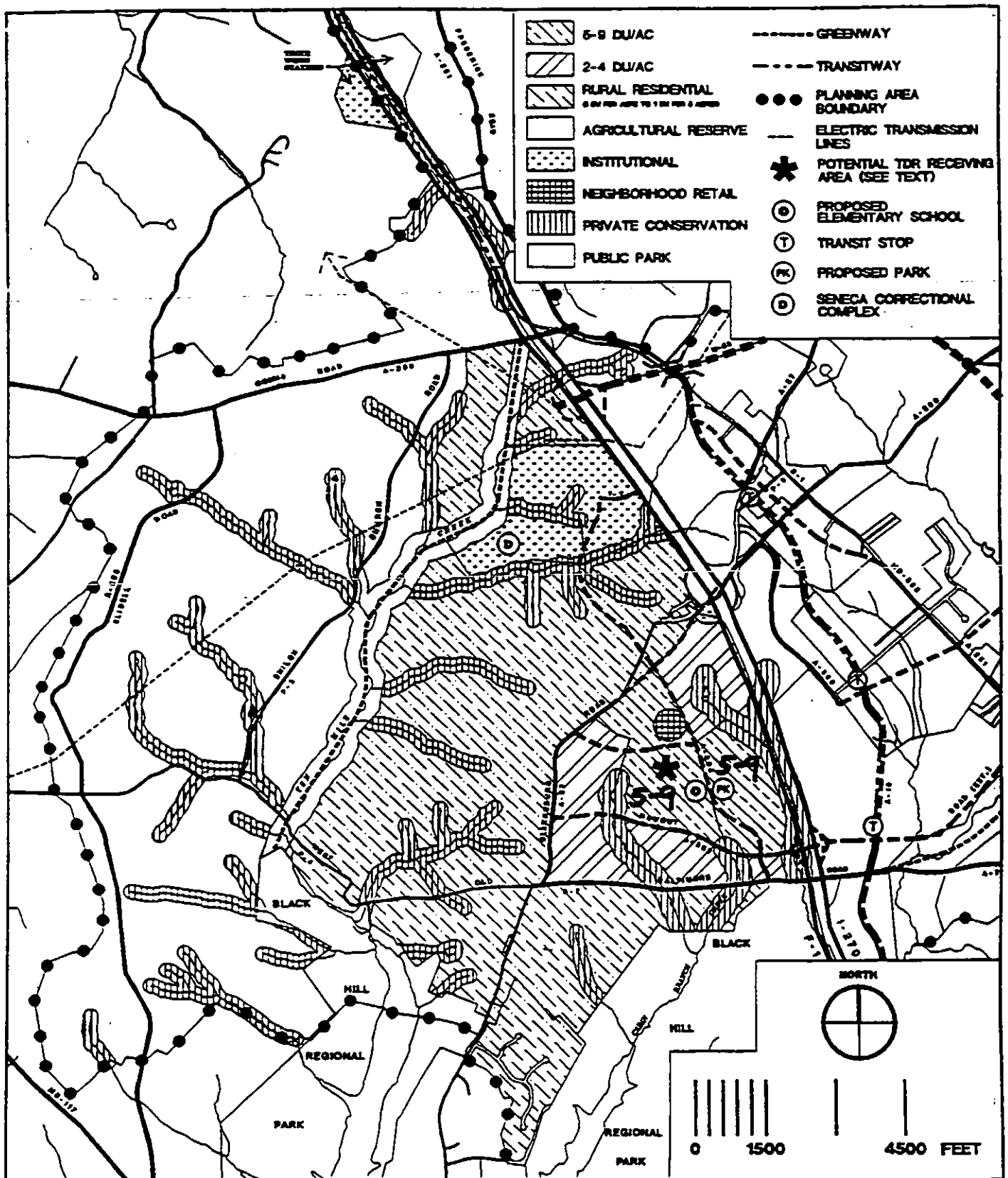
The Transit Corridor Option in the Preliminary Draft Master Plan (see page ②) limits development west of I-270 to the Cabin Branch Neighborhood.

The Modified Transit Corridor Option (see page ③) continues this concept but reduces densities in the Cabin Branch Neighborhood. The most significant reason densities are being reduced relates to housing mix. Staff is recommending that the proposed housing mix guidelines of Cabin Branch Neighborhood be modified to include 45-55% detached units rather than the 25-35% recommended in the Preliminary Draft Plan:

Cabin Branch Neighborhood Recommended Housing Mix

	<u>Multi Family</u>	<u>Attached</u>	<u>Detached</u>
Preliminary Draft	5 - 15%	55 - 65%	25 - 35%
Staff Recommended Changes	10 - 20%	35 - 45%	45 - 55%

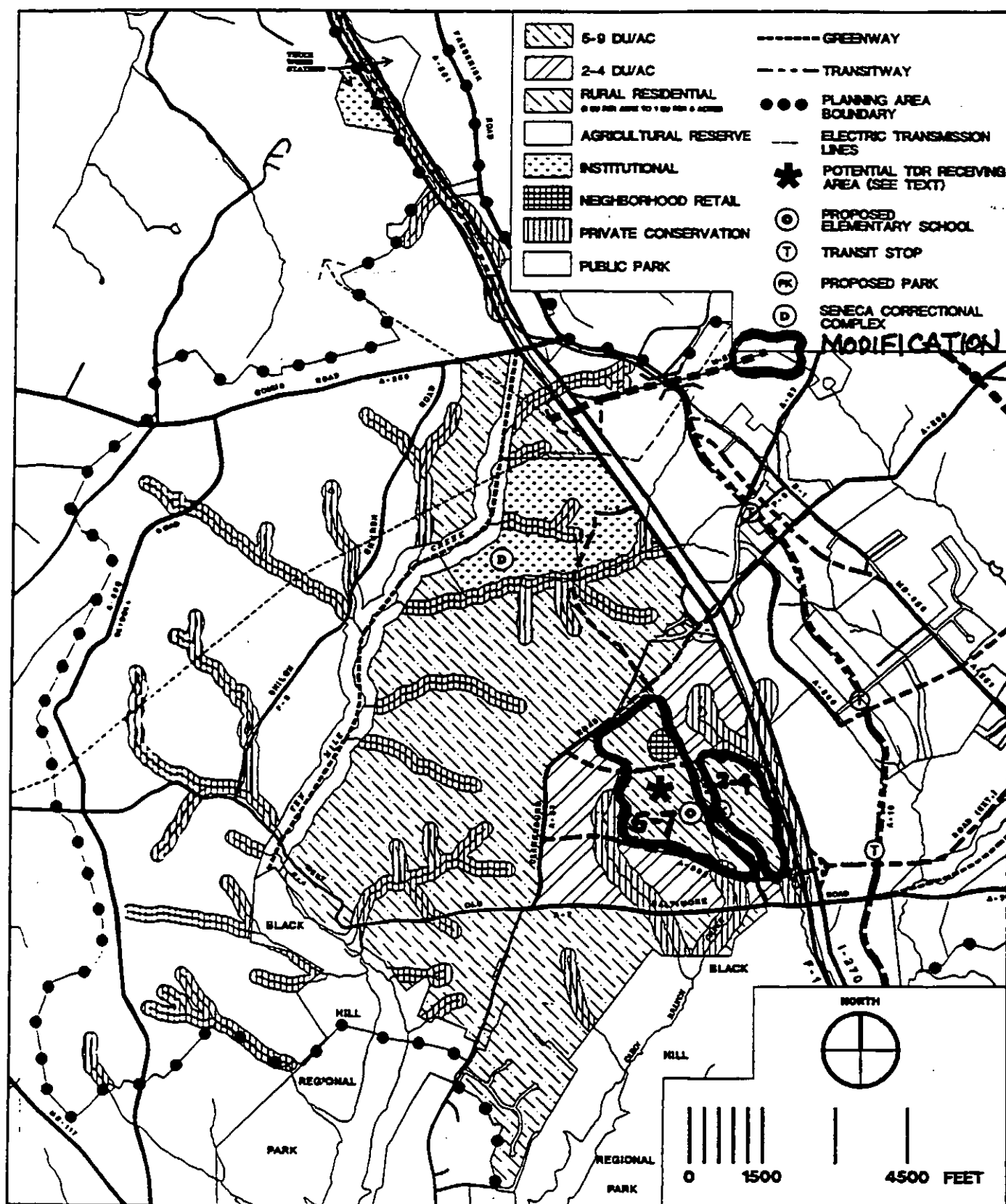
Transit Corridor



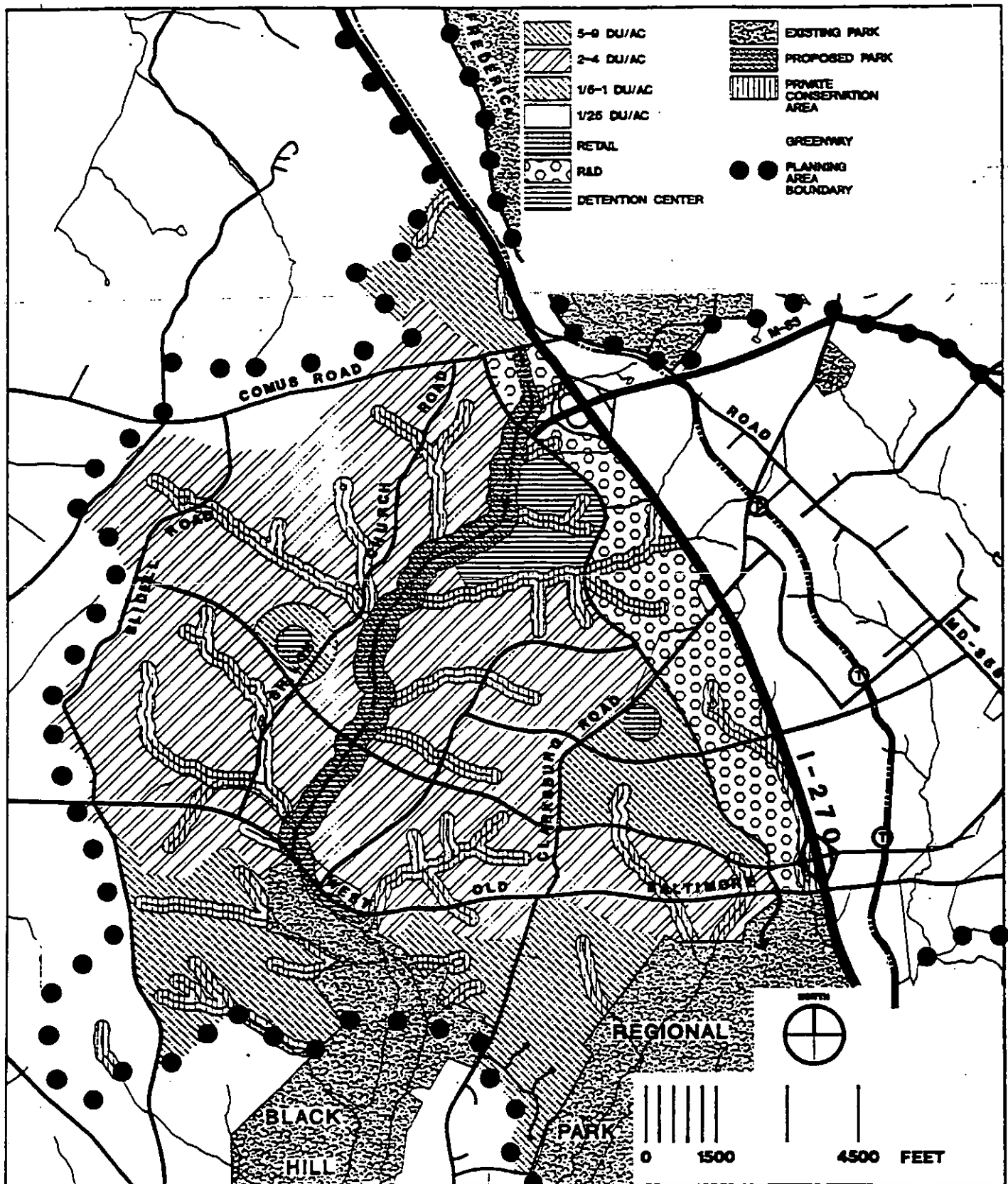
Clarksburg Master Plan and Hyattstown Special Study Area

APPROVED AND ADOPTED JUNE 1994

Modified – Transit Corridor



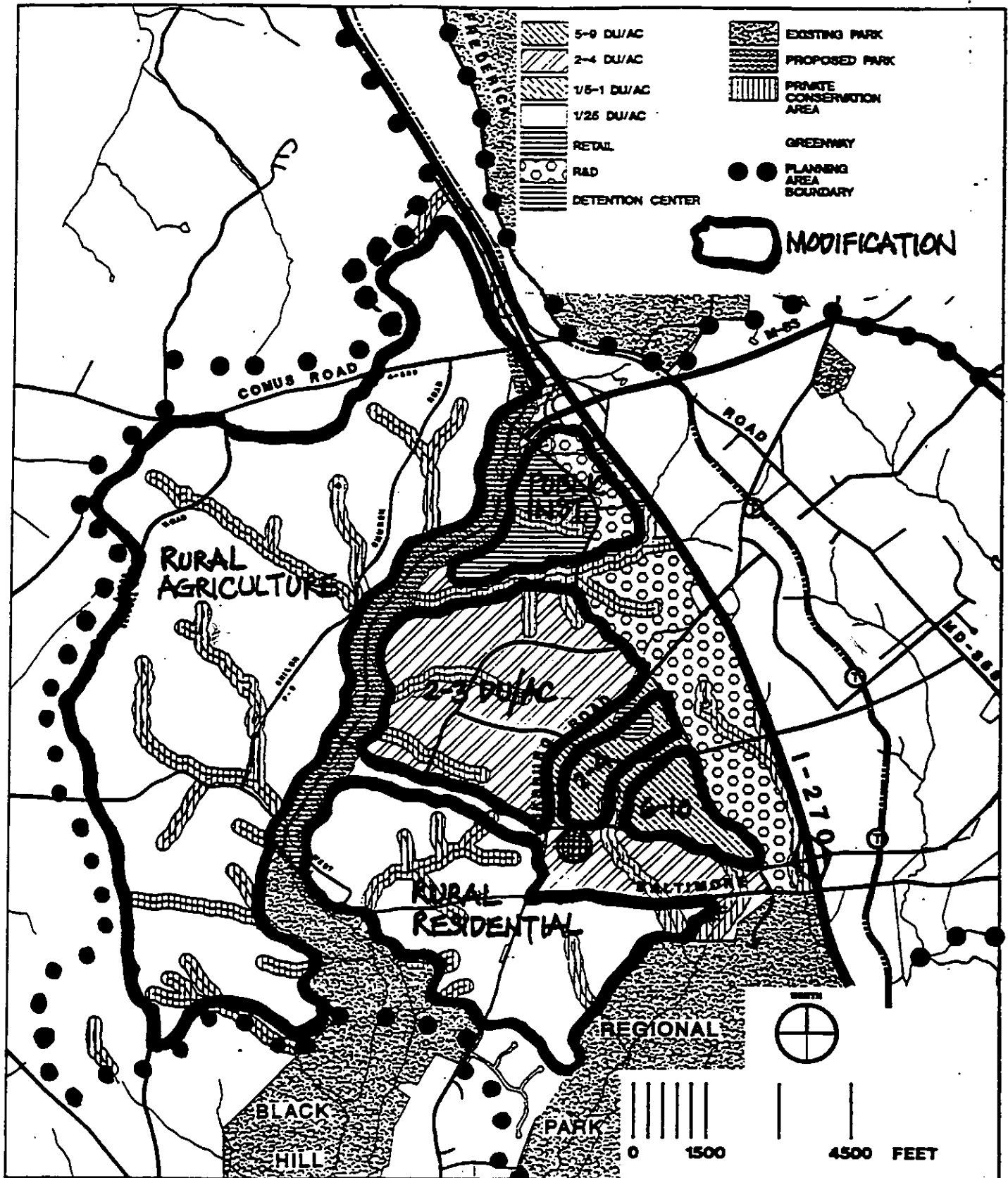
Suburban Pattern with Transit



Clarksburg Master Plan and Hyattstown Special Study Area

APPROVED AND ADOPTED JUNE 1994

Modified – Suburban Pattern with Transit



This amendment responds to the desire expressed by the Clarksburg Advisory Committee and many citizens at the Public Hearing to increase the percentage guidelines relating to detached units.

The proposed mix of housing types is consistent with the mix approved by the Planning Board for the Newcut Road Neighborhood at an earlier worksession.

The Suburban Pattern with Transit Option (see page ④) as shown in the Preliminary Draft Master Plan envisions the entire west side being developed, primarily as single family detached residences. Properties adjoining I-270 are proposed as employment.

The Modified Suburban Pattern with Transit Option (see page ⑤) amends this vision for the west side as follows:

- o The properties west of Ten Mile Creek are designated rural to provide a transition to the Agricultural Reserve area west of Slidell Road.
- o Approximately 550 acres between Ten Mile Creek and MD 121 are designated for residential development at a density of 2 dwelling units per acre.
- o Employment uses are limited to properties south of Site 30.

A tabular comparison of all the options is shown in Table 1.

Staff has concentrated our analysis on the two "modified" options. Both options recommend the area west of Ten Mile Creek continue in rural and agricultural land uses. This basic strategy west of the creek was endorsed by the Planning Board at the first worksession on Plan policies.

Since the Public Hearing, a consortium of land owners west of Ten Mile Creek have prepared a land use concept which involves clustering of residential units on a portion of the land and retaining 600 acres in open space (see page ⑭). This proposal is not part of the Public Hearing record and was submitted to staff on September 10, too late to be included in the packet. Staff will summarize the concept for the Board at the worksession; if the Board wishes to discuss the proposal in more detail, we will reschedule it for a later worksession.

STAFF ANALYSIS

Relation to Plan Policies

The Preliminary Draft Plan includes a series of Plan Policies (see pages 25-43 of Plan) which form the basis for all the land use plan recommendations. The relationship of the Modified Suburban Pattern with Transit Option to these policies is shown in Table 2. (Staff will be prepared to discuss these in more

Table 1

COMPARISON OF OPTIONS: WEST OF I-270
CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA

	Cabin Branch Neighborhood		Clarksburg Road West		Ten Mile Creek West		Total West of I-270	
<u>Transit Corridor Pattern</u>								
	<u>DU's</u>	<u>Sq.Ft.</u>	<u>DU's</u>	<u>Sq.Ft.</u>	<u>DU's</u>	<u>Sq.Ft.</u>	<u>DU's</u>	<u>Sq.Ft.</u>
a) Preliminary Draft	2,600	100,000	200	0	Agricultural Reserve		2,800	100,000
b) Modified	2,250	100,000	200	0	Agricultural Reserve		2,450	100,000

<u>Suburban Pattern With Transit</u>								
	<u>DU's</u>	<u>Sq.Ft.</u>	<u>DU's</u>	<u>Sq.Ft.</u>	<u>DU's</u>	<u>Sq.Ft.</u>	<u>DU's</u>	<u>Sq.Ft.</u>
a) Preliminary Draft	2,180	1.8-3.0 million	2,500	3.0-5.0 million	4,200	0	8,880	4.8-8.0 million
b) Modified	1,830	2.3-2.5 million	1,200	700,000	Rural and Agricultural Reserve		3,030	3.0-3.2 million

- NOTE: o "Clarksburg Road West" refers to the area between Clarksburg Road (MD 121) and Ten Mile Creek.
- o "Ten Mile Creek West" refers to the area between Ten Mile Creek and the planning area boundary.

TABLE 2

RELATION OF "MODIFIED SUBURBAN PATTERN
WITH TRANSIT OPTION" TO PLAN POLICIES

PLANNING BOARD APPROVED
CLARKSBURG MASTER
PLAN POLICY:

STAFF ANALYSIS:

- | | |
|--|---|
| 1. Town Scale of Development | The addition of 1000 units would not compromise the town concept envisioned for Clarksburg. |
| 2. Preservation of the Natural Environment | <p>This area is characterized by many sensitive environmental features including:</p> <ul style="list-style-type: none"> - Extensive forest cover - Low base in Ten Mile Creek - Relatively high diversity index for plants and animals <p>Protecting the environment from development-related impacts, such as run-off and erosion, will require heavy reliance on mitigation measures.</p> |
| 3. Greenway Network | No implication for the greenway concept. |
| 4. Transit System | MD 121 does have good potential in terms of transit service because it will connect to a future transit stop east of I-270 and to the existing MARC station in Boyds. |
| 5. Hierarchy of Roads | This proposal will not require changes to the Master Plan designation of MD 121 as a 2-lane road within an 80' right-of-way. |
| 6. Town Center | No implication for Town Center policy. |

7. Transit and Pedestrian-Oriented Neighborhoods
The illustrative plan concept presented at the Public Hearing basically achieves this Plan policy.
8. Employment Along the I-270 Corridor
The proposal for employment west of I-270 does not address any short-term or long-term County need. The issue of noise is not justification for employment uses.
9. Farmland Preservation
Creating TDR receiving areas is an essential component of County-wide farmland preservation strategy. If the west side develops with TDR's, a major contribution to the creation of receiving areas will be made.

detail at the worksession.)

The major concern regarding this option relates to the Plan Policy supporting preservation of the natural environment. All of the environmental studies done as part of this Master Plan process have identified Ten Mile Creek as a fragile stream due to its low base flow and highly erodible stream banks. In this respect, Ten Mile Creek differs from other streams in the study Area and merits special consideration.

The headwaters of Ten Mile Creek are located east of I-270 in the Town Center District (see page (11)). The Master Plan objective to create a Town Center near the historic district and along the proposed transit-way has resulted in development being proposed near the headwaters. Thus, a portion of the Ten Mile Creek will be affected by development east of I-270.

West of I-270, the County owns a large parcel, now planned for a detention center. This use will also drain to Ten Mile Creek.

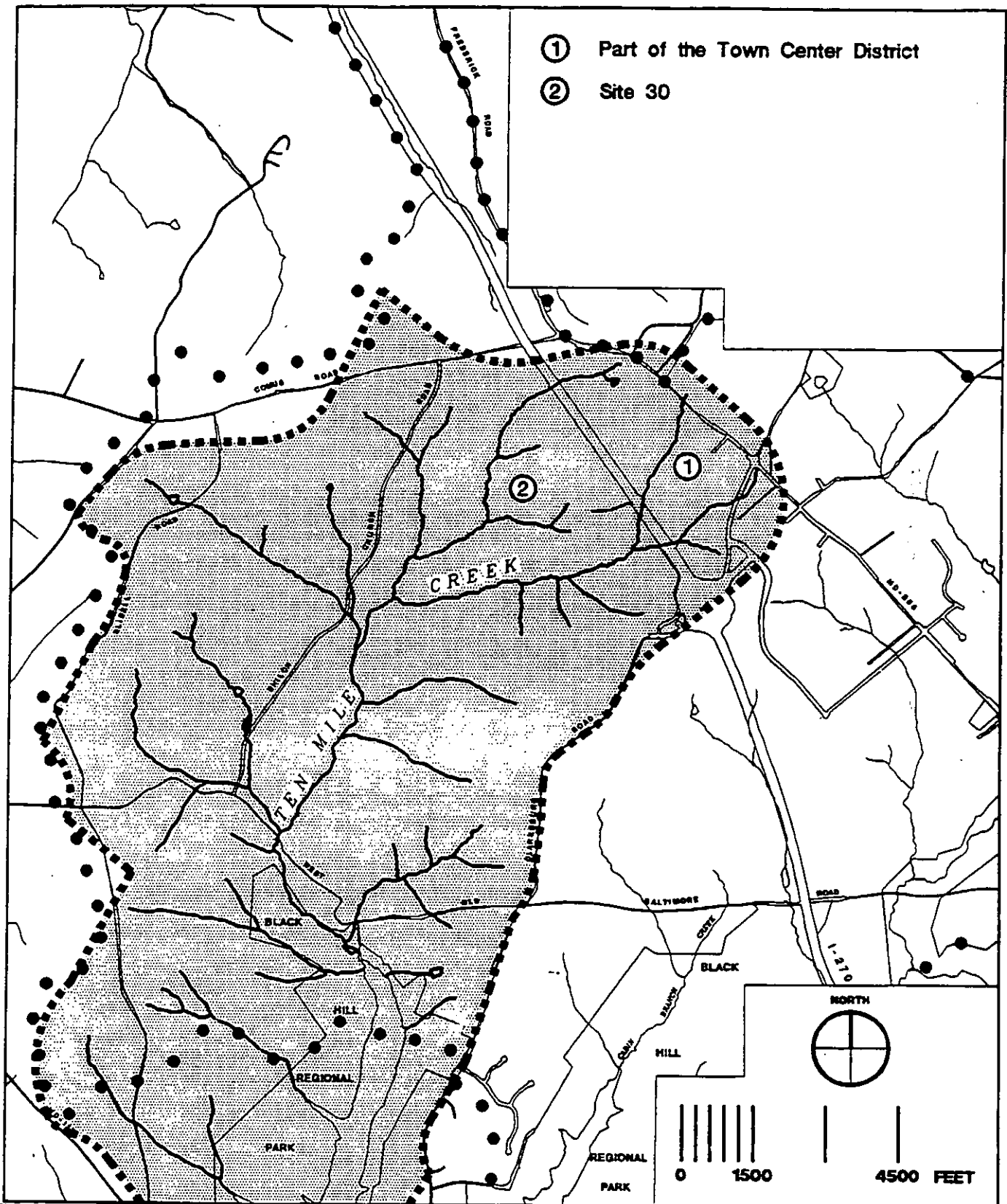
The cumulative effect of these two future development areas on Ten Mile Creek, coupled with an additional 1,000 units as proposed in this modified option west of MD 121, is of serious concern. Although the developers have prepared an illustrative subdivision plan which preserves substantial open space, proposes sewer lines outside streams, and includes a stormwater management concept, the successful protection of the stream will require a level of management and monitoring which, to date, has not been standard public policy. The stormwater management ponds, for example, which are so critical to protecting the stream water quality are presently expected to be managed by the homeowners association. This is a serious drawback. Public maintenance would be preferable but the County has a very limited history of maintaining stormwater ponds. The proposed stormwater management tax has yet to be acted upon.

The Modified Suburban Pattern with Transit Option would be very supportive of the Plan policy relating to farmland preservation if development occurred in accord with the TDR program. Assuming a TDR density of 2 to 3 units per acre, a market for an additional 300 to 500 development rights would be created. Testimony by both the County Executive and the Farmland Advisory committee stressed the importance of identifying more TDR receiving areas in Clarksburg; the Modified Suburban Pattern with Transit Option would help address this issue.

Relationship to County-Wide Housing Needs

The Modified Suburban Pattern with Transit will add an additional 1,000 units to the Clarksburg Plan. This increase in residential units will not substantively affect Clarksburg's projected share of the County's long-term residential growth.

Ten Mile Creek Drainage Area



The most significant housing impact relates to the type of units. The density proposed in the Modified Suburban Pattern Option (2-3 units per acre) is intended to encourage single-family detached units. According to data compiled by the Research Division, there is relatively little land left in the County planned for densities of 2-3 units per acre (the R-200 Zone). The potential yield of this remaining land is approximately 8,000 units. The Modified Suburban Pattern Option would increase this number to roughly 9,200 units - a 15% increase. When coupled with the number of detached units proposed east of I-270 in Clarksburg, the increase becomes even more significant.

According to the General Plan Refinement, between 1970 and 1990, single-family detached houses declined from a 68 percent share of the Montgomery County housing stock to a 52 percent share. This trend is expected to continue as land scarcity leads to higher land prices and pressure for higher densities in the urban ring and most of the I-270 corridor. Meanwhile the General Plan guiding principle of variety and choice in housing will become increasingly difficult to achieve in the case of single-family detached housing.

Single-family detached housing is the housing type strongly preferred by an overwhelming majority of home-buyers. The west side of I-270 in Clarksburg represents one of the very few remaining opportunities in the County to add to the County's planned capacity for such housing in a manner consistent with the concept of "wedges and corridors".

Relationship to County-Wide Employment Needs

The Modified Suburban Pattern Option includes a substantial amount of employment uses - from 3.0 to 3.2 million square feet.

This amount of employment is not needed to meet near-term or long-term employment demand. As stated in the General Plan Refinement Fact Sheet on Economic Activity:

If growth were to continue at the average annual rate of the years between 1970 and 1990, Montgomery County would have enough zoned capacity for jobs well beyond 2,040, based on the low estimate of capacity.

The Clarksburg Planning Area already has a largely vacant office park (Gateway 270) which is approved for 1,000,000 square feet of floor area. The mostly vacant Comsat site also has capacity for significant new development - which could reach a theoretical high of 3 to 5 million square feet. Both these parcels are located near the proposed transitway and should be the focus of all future economic development in Clarksburg.

STAFF RECOMMENDATION

Both the Modified Transit Corridor and the Modified Suburban Pattern with Transit Options achieve certain public policy objectives: one emphasizes environmental preservation policies, the other helps to implement housing and farmland preservation policies.

After carefully weighing these competing public policy issues, staff is recommending the Modified Transit Corridor Option because it best protects Ten Mile Creek.

The Ten Mile Creek is already under strain. Every additional acre of imperviousness will affect the Creek's assimilative capacity. Without better monitoring data and modeling, it is difficult to predict at what point physical, chemical and biological thresholds for Ten Mile Creek would be reached. However, it is Staff's conclusion that the Modified Suburban Pattern Option would certainly degrade existing water quality and may impact State standards for Class IV streams.

Protecting the Ten Mile Creek watershed from the negative effects of 1,000 units may be technologically feasible but, without a strong public commitment to manage and monitor these mitigation solutions, the risk of damaging the stream is simply too high.

PROPOSED DEVELOPMENT: 450 dwelling units

Slidell / Shiloh Church Property
Clarksburg Planning Area
Montgomery County, Maryland

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION

SUMMARY OF STATEMENT

STAFF COMMENTS

Environmental Issues

Jeane Onufry, Clarksburg Advisory Committee

Note that the Plan is not consistent with protection of environmentally sensitive areas because it recommends development in the very headwaters of the Ten Mile Creek.

The Master Plan emphasizes protection of environmental features, first by preservation and non-disturbance, then by mitigation measures. The Transit Corridor Pattern Option attempts to prioritize Clarksburg's environmental resources, and locate intense development in logical locations as far away from sensitive areas as possible. Obviously, the most environmentally sensitive approach would be to prohibit development altogether, but this is neither possible nor desirable especially when other public policies, such as housing, must be addressed. Not every square foot of wetland, nor every tree, can be saved in any land use scenario considered.

The Plan clusters development into certain parts of the Planning Area, in part for sound environmental reasons. These reasons include keeping development pressure off of large tracts of forest, headwater streams, and steep slopes; even with mitigation and stream buffers, these resources do get damaged when development invades their boundaries. Development's effects also impact resources indirectly by redirecting and changing the amount of water available to trees and stream baseflow. However, some watersheds have less of these sensitive areas than others, and are predicted by our water resources study to be able to recuperate from the effects of development better.

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STAFF COMMENTS

Environmental Issues

Jeane Orufry, Clarksburg Advisory Committee
(Cont'd)

Other reasons have to do with common-sense approaches to environmental protection, such as reducing air and water pollution by building fewer miles of road surface for auto travel, or by providing larger areas for connected forest cover rather than many tiny stands of trees, so wildlife can migrate along a corridor. The staff's recommended land-use option plan was designed to support other goals as well, such as agricultural preservation, mass transit opportunities and providing a focal point for the Town Center of Clarksburg -- these goals have been considered in the context of environmental protection and mostly have been compatible with Environmental Planning Division goals. The main exception to this compatibility is the location of the Town Center and Site 30 in the uppermost reaches of Ten Mile Creek (see map on page 11).

The location of the Town Center and Site 30 (the County Detention Center) is driven by land use reasons that, taken as a whole, outweigh the potential environmental damage caused by locating these in headwater areas. The Detention Center was sited here due to constraints outside the control of the Planning Department. Since they are planned to benefit the general public good, Environmental Planning Division staff has acceded to the placement of these features in the headwaters of Ten Mile Creek, provided that they will incorporate appropriate best management practices for stormwater, and wetland and tree preservation

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NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues</u>		
Jean Onufry, Clarksburg Advisory Committee (Cont'd)		as much as possible. It should be noted that some density will be lost from the Town Center projections because areas will be undevelopable due to stream buffers and SWM facilities.
Sandra Frazier Potomac Watershed Citizens Coalition	Believe development in Clarksburg must give first priority to the preservation of the existing biological integrity of the streams and forest. Housing, employment, urban parks and recreational needs can be met by redevelopment along existing corridors such as I-270 and Metro rail.	See comments above.
Metz and Blumberg, Clarksburg Venture Limited Partnership Properties	Suggest that CVLP and Lavine properties can employ "extra-ordinary BMP's" to protect the environment, just like the Detention Center and the school bus parking lot/maintenance yard.	See comments above.

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NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues</u>		
Neal Fitzpatrick, Audubon Naturalist Society	<p>Note that BMP's alone will not be adequate to protect the existing high quality watersheds of Cabin Branch and Little Seneca, proposed for extensive development. Recommends in conjunction with BMP's, downsizing the proposed development.</p> <p>Note science and art of wetland mitigation is immature and should not be a major consideration in the acknowledged objective of protecting the value and function of wetlands in Clarksburg.</p>	See comments above.
Harry Leet, et. al., Slidell/Shiloh Church Properties	Note that only Ten Mile Creek is proposed for agricultural preservation, while all tributaries (Ten Mile Creek, Cabin Branch Creek, and Little Seneca Creek) flow into Little Seneca Lake.	See comments above.
Mary Beth Beck, Individual	Urge the County to take no risks that might jeopardize the Ten Mile Creek watershed.	See comments above.
Jennifer Jordan, Individual	<p>Recommend that in light of the visions of the "Year 2020 Panel of Experts", the drive to make Clarksburg into a Corridor Town of the scale proposed should be re-visited. Questions whether the Plan adheres to the visions as follows:</p> <ul style="list-style-type: none"> o Are sensitive areas protected? <p>Wetlands are proposed to be built upon. Little Seneca Creek, which flows into the emergency water supply reservoir, is sacrificed.</p>	See comments above.

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
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TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
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Environmental Issues

A.M. Natelli, King/Bennett/Shiloh Properties

Notes that carefully planned and developed clustered development can have the following positive environmental effects:

- o East of Ten Mile Creek includes the Town Center and Site 30. Given the intensive development which is proposed for these areas, it seems ironic that less sensitive and less forested land would be designated Rural Cluster.

See comments above.

John Delaney, Slidell/Shiloh Church Properties

Note that the Plan recommends intense development in the headwaters of Little Seneca Creek and Ten Mile Creek, despite the fact that Little Seneca Creek empties into Little Seneca Lake and identified by Environmental Planning staff as exhibiting "good stream quality and relatively stable stream channels and numerous wetland areas".

See comments above.

Laury Miller, SugarLoaf Citizens Association

There should be no development in the Ten Mile Creek watershed and its headwaters.

See comments above.

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
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TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues</u>		
John Delaney, Slidell/Shiloh Church Properties	Believe that modest development of the Slidell/Shiloh Church Properties would significantly reduce the impacts in the Little Seneca Creek Watershed regarding loading rates for phosphorous, organic nitrogen, and other non-point source pollutants.	See comments above.
Shelly Connolly, Clarksburg CAC member	Opposes residential uses adjacent to I-270 due to noise, necessitating barriers which are ugly and characteristics of urban environments.	<p>With appropriate setbacks, residential areas can be constructed without noise barriers - the houses and back yards just have to be located far enough away from the highway or be oriented to minimize noise impacts. Noise tolerant uses such as recreation can also be placed between houses and the highway. Some barriers may be needed in places where small parcels have no maneuvering room to cluster houses away from the road. It is important to remember that having housing close to the highway helps to minimize travel distances and traffic problems, and reduces the road network needed. This helps reduce air pollution and road water runoff pollution.</p> <p>The noise contours shown in the master plan are projecting a worst-case scenario. At the subdivision stage, when site topography for each property is available, detailed noise analyses can be done to take into account the blocking effects of rolling hills, which will, in all likelihood, reduce the area of noise impacts. Therefore, the noise buffers shown along major roads like I-270, Rt. 27, and M-83 are expected to narrow in most places when more detailed information is developed in the regulatory process.</p>

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
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TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues</u>		
Olivier de Messieres, Boyds resident	<p>Supports the Plan's recommendation to concentrate development east of I-270 and protect the water resources west of I-270 because:</p> <ol style="list-style-type: none">1. Protection of the water resources (Ten Mile Creek, Cabin Branch and Little Seneca Reservoir System); and,2. Protection of the air resources (trees) of the region.	Staff concurs.
Norman Mease, Property Owner	<p>Recommends that the Plan be corrected to state that Ten Mile Creek is not the largest of the sub-watersheds feeding Little Seneca Lake, but that Little Seneca Creek sub-basin is.</p>	Staff concurs. Plan text will be corrected.

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Environmental Issues

Nick Sussillo, Clarksburg Initiative Association	Support the Ten Mile Creek Conservation Committee. Supports Policy #2 of the Plan in protecting the area's natural resources and in designating Ten Mile Creek as an environmental resource area.	Staff Concurs.
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Oppose sewerage Ten Mile Creek. The steepness of the slopes will promote the siltation of Seneca Lake. Increased runoff could have a deleterious effect on the quality of drinking water from the lake.

See staff comments on page 27.

Nelson Clark, Individual

Note that according to Maryland Geological Survey, there are no known active geological faults in the Clarksburg Study Area which would effect potential development.

Staff Concurs.

Carol Jordan, Individual

Recommends adhering to all of the Plan's environmental recommendations listed on page .

Staff Concurs.

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NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues</u>		
Jennifer Jordan, Individual and Richard Strombotne and Jeane Onufry, Clarksburg Citizens Advisory	Proposes including regional stormwater manage- ment ponds rather than small stormwater management ponds, to reduce the danger to children and animals resulting from proliferation. Regional ponds increase the likelihood that storm water management ponds will be adequately maintained.	Staff Concurs.
Cathy Jewell, Property Owner and Jennifer Jordan, Individual	Support testimony of Clarksburg Initiative Association and the Ten Mile Creek Conservation Committee.	No response is needed.
A. M. Natelli, King/Bennett/Shiloh Properties	Note that carefully planned and developed clus- tered development can have the following positive environmental effect: Afforestation of the tributaries of Ten Mile Creek will enhance water quality of the watershed. There would be an increase in aggregate tree-cover on the property. From an environmental standpoint the west side of I-270 is no different than the east side. Conversely, the "developable por- tions" on both sides should be developed wisely.	If work is needed in a watershed where no development is taking place, this work can be funded or provided through appropriate programs (SWM waiver fees/work, off-site reforestation, etc.) via projects in other parts of Clarksburg. Also, natural processes, such as reforestation, may correct existing problems without interven- tion. From an environmental standpoint, the west side has more sensitive features, i.e. steep slopes, headwater stream areas, forest cover, etc.

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NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues</u> Norman Mease, Property Owner	Believe R-200 zoning is reasonable for the Ten Mile Creek area, given that stream pollution loading from farming is equivalent to development at 6 du/ac, sewer is economically feasible at 2 du/ac, and the G&O environmental study concluded that there is no fatal flaw to development.	Water resources experts agree that no amount of mitigation or BMPs can replace a healthy natural watershed system of previous forest and/or meadow. This is the environmental preservation strategy being proposed for Ten Mile Creek - retaining as much of the stream valley, as is possible, in its natural status - east of I-270, where development is proposed to achieve other plan goals and objectives, mitigation measures are recommended.

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
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TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues</u>		
Don Maxey, et. al., Tenmile Creek Conservation Committee	Note that the air quality will be affected by stripping trees.	Tree preservation will be considered as part of all plan reviews due to the new county tree bill. Where trees must be removed, extensive reforestation/afforestation shall be required either on-site or off-site. Payment to the county's tree fund will be a last resort for developers. Therefore, Clarksburg should continue to feature extensive tree coverage.
Laury Miller, SLCA	Recommends that a comprehensive reforestation program be established to increase water quality and forest coverage in the Little Seneca and Ten Mile Creek watersheds.	See comments above.
	Recommends that other strategies be established to increase water quality and forest coverage in the Little Seneca and Ten Mile Creek watershed.	Monitoring programs and watershed wide SWM planning are being investigated by both M-NCPPC and MDEP. As new funds become available, these strategies will be considered as high priority at both agencies, and advice from outside groups will be sought as suggested. It is important to realize, however, that monitoring is not required for development now, and should not be imposed haphazardly, since data only gives a snapshot of conditions at the time of sampling. Long-term monitoring costs lots of money, and will need a steady source of funding, which is not available from piecemeal development.

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Environmental Issues

Don Maxey, et. al., TCC

Note that one must contend with faults if trying to put sewer lines in any of the fractured and faulted rocky soil along Ten Mile Creek or Little Bennet Creek.

Staff Concurs. Engineering solutions to constructing in fractured rock may need to be applied. See attached letter on page 27

Note severe problems of underlying rock and little water penetration along Ten Mile Creek. Every parking lot and every house will cause a problem, disturbing and causing an almost impenetrable barrier for the water.

Staff agrees that construction in the Ten Mile Creek basin will cause environmental degradation. See attached letter on page 27

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

REVISED: June 23, 1992

May 20, 1992

TO: Lyn Coleman, Coordinator, Community Planning Division

VIA.: Nazir Baig, Coordinator,
Environmental Planning Division

FROM: Laura Bachle, Environmental Planning Division

SUBJECT: Don Maxey's Public Hearing Testimony on Clarksburg

We appreciate the opportunity to examine Mr. Maxey's public hearing testimony on the Clarksburg Master Plan. Mr. Maxey's personal experience with Parr's Ridge and with the Clarksburg environment in general is invaluable. We are gratified to note that his experience of the environmental constraints to development in the area affirms our own conclusions. We have long been aware of Mr. Maxey's expertise in this area. He is a notable contributor to our "in-house" resource list on the Clarksburg environment that we will continue to utilize.

In regard to sewer issues in the Ten Mile Creek area, we have no reason to doubt the observations Mr. Maxey has made regarding the difficulty of constructing in this basin. As with all matters of engineering, a distinction must be made between the "feasibility" of construction and the "desirability" of construction. It is our conclusion that it is engineeringly feasible to construct a sewer in Ten Mile Creek, however, it is not environmentally desirable.

We also shared Mr. Maxey's testimony with WSSC. They also could find no fault with Mr. Maxey's conclusions about the environmental constraints in the area. However, there is no reason for them to conclude that sewer construction would be engineeringly unfeasible. In order to fully assess the difficulty of sewerage in this area, a detailed geotechnical and engineering study would have to be performed. Such studies are regularly executed during the design phase for every pipeline WSSC builds. Without such a detailed study, no strong conclusions as to the feasibility of sewerage in the basin could be made. No study could be done prior to such detailed engineering to add any more information than we know now.

WSSC also does not deny that there are engineering problems that require resolution when building within environmentally constrained areas. Factors such as high water tables, shallow depth to bedrock, steep slopes, etc., are all constraints that require an engineered solution to overcome. These factors are taken into account during the design phase. Construction is modified accordingly. Such detailed engineering studies is part

of the reason why WSSC enjoys such a high level of success in operating their systems.

Land use recommendations we have made as staff are based on the information at hand. Mr. Maxey's testimony supports our conclusions about the environmental sensitivity of this area. We cannot foresee any additional studies that could reverse our land use recommendations. Therefore, we reaffirm the land use recommendations made in the preliminary draft. Should the Planning Board and/or Council choose an alternative land use that would require community sewer service, then we will work closely with WSSC to provide the most economical and environmentally sensitive alignment we can get.

Please let me know if you need further clarification regarding this matter. Thank you!

LB:lb

cc: Perry Berman, Chief, Community Planning Division
Jorge Valladares, Chief, Environmental Planning Division
Elizabeth Forbes, Water Resources Division, WSSC

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
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TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Environmental Issues (Cont'd)</u>		
Neal Fitzpatrick, Audubon Naturalist Society Carol Jordan, Bev Thoms, John Collier, Bonnie Collier Individuals and John King, Property Owner	Agree with special protection for the Ten Mile Creek watershed and its designation as rural open space and agriculture.	Staff agrees
Daniel Litteral (FFLP) Harry Leet, et. al. Slidell/Shiloh Church Properties	Disagree that Ten Mile Creek is a natural transition area, since both east and west areas drain into the creek.	Ten Mile Creek is an excellent divide between land uses in this case. Agricul- tural Reserve west of the stream and rural land uses to the east.
Julius Cinque, Individual	Support the preservation of land west of I-270, but need more protection for Cabin Branch. Recommend buffers from residen- tial uses along MD 121 from I-270 to West Old Baltimore Road.	Agree to the need for buffers along Cabin Branch.
Jeanne Onufry, Clarksburg Citizens Advisory Committee	Disagrees with minimal consideration for development west of I-270. Consider environmentally sensitive land development practices that could possibly be used to develop west of I-270 and recommend that the Plan Option West of I-270 continue to be studied and refined.	Staff is not convinced that given current levels of technology and give the absence of public commitment to manage/operate stormwater management facilities that the fragile character of Ten Mile Creek can be adequately protected.
Julius Cinque and Bonnie Collier, Individuals	Oppose the Suburban Pattern Option for it is a developer's ploy for sewer and a direct threat to the aquifer and to agri- cultural preservation. It would be de- structive to the stream valley environment and ecosystems.	Staff agrees that preservation of the Ten Mile Creek must be a major Plan priority. Sewer is not proposed in the mainstream of Ten Mile Creek.

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TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION

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STAFF COMMENTS

Environmental Issues (Cont'd)

Richard Stromborne and Jeane Onufry,
Clarksburg Civic Advisory

Recommend an in-depth study of the Ten Mile Creek drainage area to determine if it is feasible to sewer the area and still preserve environmentally sensitive sites.

The construction of the sewer line itself is one impact - of even greater concern is how the development of 6,000 housing units and associated infrastructure will affect water quality in Ten Mile Creek

Land Use Issues

Hal Baker
Upcounty Citizens Advisory Board

Notes that the UCA Board is split regarding development in the Ten Mile Creek Area.

No response needed.

Merritt Ednie, Boyds Civic Association and
Clarksburg Initiative Association

Favors Staff recommendation for it is congruent with the Boyds Master Plan to preserve open space around the reservoir. Natural line of demarcation for development is not West Old Baltimore Road, but I-270.

Staff is recommending development west of I-270 in the Cabin Branch neighborhood but the Plan includes guidelines to cluster development toward I-270 and decrease density at the edge of the area closest to Boyds.

John King, Property Owner

Notes that based on experience with the current interpretation of the health regulations, in reality, the area between Ten Mile Creek and MD 121, including the area which is adjacent to the high density development in the "Triangle", will not be the transition area envisioned in the Plan but will remain as rural farmland and open space.

Staff addresses alternative development concepts for this area elsewhere in the packet (see Modified Suburban Pattern with Transit Option).

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NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
Jeane Onufry, Citizens Advisory Committee and Clarksburg Civic Advisory	Recommend that the end-state housing should include 80% detached units west of the creek and 70% detached units east of the creek.	Staff does not endorse residential development west of Ten Mile Creek. Staff has prepared a land-use plan alternative for the area east of the creek which would emphasize single-family detached housing.
Nick Susallo, CIA Laury Miller, SCLA and Jennifer Jordan, Individual	Oppose the Suburban Pattern Option which violates planning policies #2 and 9 on the environment.	Agree. Staff has provided a modified Suburban Pattern Option for Planning Board review.
Harry Leet, et. al. Slidell/Shiloh Church Properties and Daniel Litteral, FFLP	Support the Suburban Pattern Option, with reduced development east of I-270 to make the number of houses and jobs nearly equal to the Transit Pattern Option. This is consistent with prior County planning policies for the area west of I-270, designating it as a growth area.	County policies do not designate the area west of I-270 as a "growth area". The 1968 Clarksburg Plan proposes rural resi- dential (one acre zoning) and the General Plan shows development concentrated to the east of I-270.
A.M. Natelli, et.al., PIA King/Bennett/Shiloh Properties	Recommend a revised Suburban Pattern Option with light industrial employment along the I-270 corridor, reduced density on the east, and further development allowed between MD 121 and Ten Mile Creek, as well as the area to the south of West Old Baltimore Road.	This option is discussed elsewhere in the packet.

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
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NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Land-Use Issues (Cont'd)</u>		
Harry Semmes, Individual	Recommend clustering 2 du/ac with open space for west of I-270. Believe RC zoning is exclusionary zoning.	The Modified Suburban Pattern with Transit addresses this issue.
James R. Shaw, Frederick County Planning and Zoning Department	Support the Agricultural Reserve west of I-270. Minimizing intensive development west of I-270 will help to reduce development pressures west of I-270 in Frederick County which is designated for Agricultural/Rural and Conservation uses. Support the recommended transit corridor pattern which focuses in intensive development east of I-270. The success of this pattern in Clarksburg would help to encourage similar land-use patterns that are recommended for the Urbana regional center.	No response needed.

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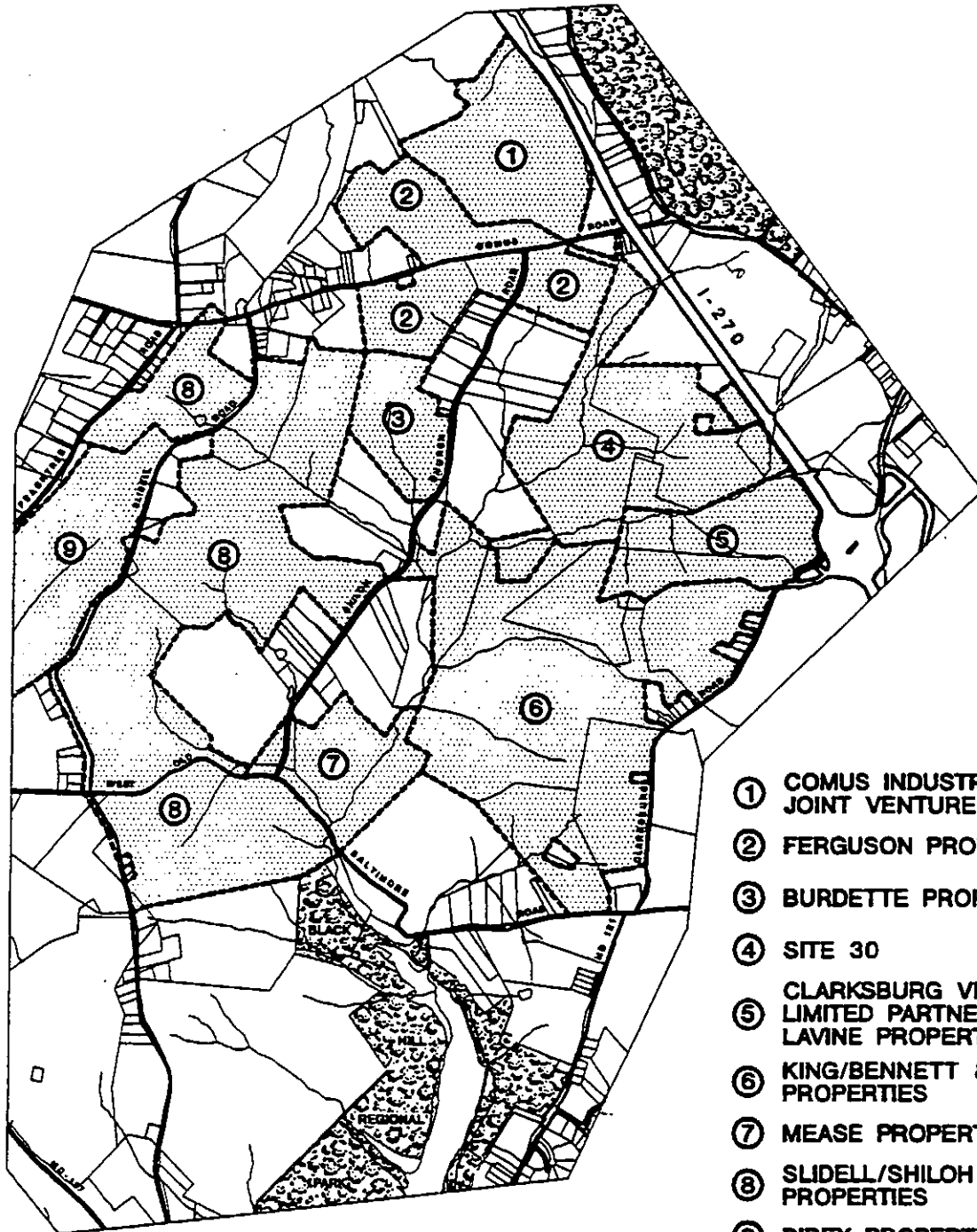
NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Farmland Preservation</u>		
Bonnie Collier, Individual John King, Property Owner and Laury Miller, SLCA	Suggest agricultural preservation west of Ten Mile Creek. Using a natural feature to determine RDT boundary seems logical and appropriate.	Agree
E. Allen Burdette, Property Owner	Support the Suburban Pattern Option since there is no need for more Agriculture preservation.	The future of agriculture in Montgomery County depends upon the existence of a very large, critical mass of farmland and supportive land-use policies in the area adjoining the Agriculture Reserve. Designating the area west of Ten Mile Creek as agricultural will help reinforce farmland preservation policies in this portion of the County.
Norman Mease, Property Owner	Note that the Ten Mile Creek Valley is not suitable for farming since it is particu- larly rocky with a large amount of "quartz floaters".	The agricultural suitability of soils in the Ten Mile Creek Valley range from very poor (stream valleys) to good. In 1990, the majority of privately owned land in the area was agriculturally assessed, one indicator that farming is an important land use activity.
Harry Leet, et. al. Slidell/Shiloh Church Properties Norman Mease, Property Owner Daniel Litteral, Ferguson Family Ltd. Ptnshp.	Note that the suitability of the soils in the Ten Mile Creek area are poor for farming.	See comments above.

REVIEW OF TESTIMONY (ORAL & WRITTEN) OF PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: LAND USE PLAN OPTION WEST OF I-270

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Individual Properties (See attached map)</u>		
Harry Leet, et. al. and John Delaney Slidell/Shiloh Church Properties, 678 acres	Note that the proposed 98% reduction in density on the Slidell/Shiloh Church properties for providing public open space would effect a taking of the land without just compensation in violation of the Constitution.	The 1968 Clarksburg Master Plan made a critical assumption regarding this area: that the entire Ten Mile Creek would be provided with public sewerage. This assumption is not continued in the Preliminary Plan because of the Plan's emphasis on farmland preservation and environmental preservation. Changes in public policy justify re-examination of densities in the Ten Mile Creek area.
	Suggest that cluster development incorporating "BMP's" and appropriate stream valley buffers, can address adequately any negative environmental impacts associated with the longenvisioned residential development of the property.	On September 10, 1992, the property owners presented an illustrative cluster concept for staff and Planning Board review (see page 14). This concept is not part of the Public Hearing record. If the Board wishes to discuss this proposal in any detail, an additional worksession will be necessary.
Thomas Natelli King/Bennett/Shiloh Properties, 532 acres	Question whether agricultural uses work so close to dense housing, particularly the King/Bennett/ Shiloh properties designated as rural across the street from 5-9 du/ac in the Cabin Branch neighborhood.	The Modified Suburban Pattern Option includes this concept (see page 2 of the packet for discussion of the option and staff response to it).
	Believe not enough consideration has been given to appropriate sensitive development that can occur east of the Ten Mile Creek Greenway.	See comments above.

Ten Mile Creek – Property Location Map



- ① COMUS INDUSTRIAL PARK JOINT VENTURE
- ② FERGUSON PROPERTY
- ③ BURDETTE PROPERTY
- ④ SITE 30
- ⑤ CLARKSBURG VENTURE LIMITED PARTNERSHIP & LAVINE PROPERTIES
- ⑥ KING/BENNETT & SHILOH PROPERTIES
- ⑦ MEASE PROPERTY
- ⑧ SLIDELL/SHILOH CHURCH PROPERTIES
- ⑨ DIBEX PROPERTY



0 1000 3000 FEET

REVIEW OF TESTIMONY (ORAL & WRITTEN) OF PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Individual Properties (See attached map)</u>		
Thomas Watelli (Cont'd) King/Bennett/Shiloh Properties, 532 acres	<p>Oppose RC zoning for the King/Bennett/Shiloh properties. Recommend condemning the property for public use or purchasing the property, or RDT zoning.</p> <p>Propose the following for King/Bennett/Shiloh properties: 1.9 du/ac with 30% townhouses, 70% single-family detached houses, and 62% open space.</p> <p>Recommend a revised Suburban Pattern Option with light industrial employment along the I-270 corridor, reduced density on the east, and further development allowed between MD 121 and Ten Mile Creek, as well as the area to the south of West Old Baltimore Road.</p>	<p>See comments above.</p> <p>See comments above.</p> <p>See comments above.</p>
Robert Metz, Comus Industrial Park Joint Venture, 152 acres	Oppose rezoning Comus Industrial Park Joint Venture property from I-3 to RDT. Questions nexus and justification for change to property owners.	<p>The continued designation of this property as I-3 is inconsistent with the Plan's land-use and transportation policies.</p> <p>Staff has explored alternative options with the property owner including the I-4 Zone. According to the property owner, without public sewer (none is proposed by the Plan), the I-4 Zone would result in very low intensity employment uses on small portion of the site.</p> <p>Staff still finds employment uses troublesome particularly at this location on Comus Road which marks the "gateway"</p>

REVIEW OF TESTIMONY (ORAL & WRITTEN) OF PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: LAND USE PLAN OPTION WEST OF I-270

NAME AND ORGANIZATION

SUMMARY OF STATEMENT

STAFF COMMENTS

Individual Properties (See attached map)

Robert Metz, Comus Industrial Park Joint Venture,
152 acres (Cont'd)

to the west side. In addition, I-4 Zone does not have site plan review. The key reason for considering any employment uses is that the property has been zoned for employment since 1966. However, as noted elsewhere in this report, recent studies show there is now enough industrially zoned land in the County to support employment needs until at least 2040.

Robert Metz, Dibex Property, 49 acres

Request retaining R-200 zoning for 49 acres of the Dibex property or retain R-200 zoning for the 10 acres which are not part of the proposed golf course.

The area surrounding this property is proposed for Agricultural Reserve. Retaining R-200 zoning on this property would be inconsistent with broader Plan policy to preserve farmland.

Note percolation tests conducted for the portion of the Dibex property outside of the proposed golf course.

Request that if the golf course is approved for the property, that the Master Plan should designate this on the Land Use Map.

Robert Metz and Alfred Blumberg, Clarksburg
Venture Limited Partnership, and Lavine
Properties, 123 acres

Support the Suburban Pattern with Transit Option with R&D zoning on the east and I-5 du/ac residential to the west for the CVLP and Lavine properties. Propose a PD at 2.3 du/ac and R&D at 0.2 FAR. Believe they are inappropriate for RC development because of their location between Site 30 to the north, I-270 to the east, and both MD 121 and the Cabin Branch Neighborhood to the south.

The Modified Suburban Pattern Option includes this concept (see page I-1 of packet).

REVIEW OF TESTIMONY (ORAL & WRITTEN) OF PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

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TOPIC: LAND USE PLAN OPTION WEST OF I-270

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Individual Properties (See attached map)</u>		
Robert Metz and Alfred Blumberg Clarksburg Venture Limited Partnership and Lavine Properties, 123 acres (Cont'd)	Recommend clustering 2 du/ac with open space for west of I-270. Believes RC zoning is exclusionary to the west side.	See comments above.
	Note that the rubble fill area on the CVLP and Lavine properties are not an acceptable area for residential use. The cost of providing necessary "bridge compaction" or "pilings" for construction would make residential use prohibitive; the return on R&D land would warrant such cost.	See comments above.
	Suggest that the same reasoning used for the development of the Cabin Branch Neighborhood applies to the CVLP and Lavine properties.	
Daniel Litteral, Ferguson Property, 180 acres	Note that it is unreasonable to designate the Ferguson property as RDT when it is so close to I-270.	Although I-270 is near the proposed property, no access from Conus Road is planned. Access to Site 30 will be from MD 121 so traffic impacts on Conus Road should not be significant.
	Note that the intense institutional use and traffic associated with Site 30 would endanger farming on the abutting Ferguson property.	
	Support the Suburban Pattern Option and retention of current residential zoning for the Ferguson property.	

REVIEW OF TESTIMONY (ORAL & WRITTEN) OF PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Individual Properties (See attached map)</u>		
Daniel Litteral, Ferguson Property, 180 acres (Cont'd)	Support the Suburban Pattern Option, with reduced development east of I-270 to make the number of houses and jobs nearly equal to the Transit Pattern Option. This is consistent with prior county planning policies for the area west of I-270, designating it as a growth area.	
<u>Site 30, 300 acres</u>		
Nick Sussillo (CIA)	Recommend Site 30 be master planned. Propose Plan be amended to include a set of local community and county uses developed through consensus. Suggest forming a Site 30 committee. Need to proactively define real possibilities rather than waiting for "Lulu's".	Agree. A master plan for Site 30 is badly needed; public uses should not be considered on a case by case basis over time. Citizen involvement is critical. Staff has conveyed these comments to DFS and OPI.
Thomas Natelli and Kathie Hulley, Individuals	Recommend that if the Plan calls for no development between MD 121 and Ten Mile Creek, apply the rule to the County Detention Center as well.	As noted in the Preliminary Draft Plan (see page 104) a detention center is now planned for Site 30. The future of the detention center, will be reconsidered by the County Council in January 1993 because of the Council's concerns about operating costs and changing assumptions about the number of future inmates.

REVIEW OF TESTIMONY (ORAL & WRITTEN) OF PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

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TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Site 30, 300 acres</u>		
Carol Jordan, Individual	Recommend eliminating the jail, the bus parking lot, and the sanitation department vehicles, for Clarksburg will be burdened with what all the other communities do not want.	As noted in the Preliminary Draft Plan (see page 104) a detention center is now planned for Site 30. The future of the detention center, will be reconsidered by the County Council in January 1993 because of the Council's concerns about operating costs and changing assumptions about the number of future inmates.
Henry Hamm (MCFB)	Suggest offering the FDA all of Site 30 free of all County projects or uses.	This Plan does not envision major employment on Site 30.
John Collier, Individual	Question the effects of a bus depot at Site 30 because of the potential for contamination of Ten Mile Creek.	The Plan states that a decision regarding the location of an Upcounty bus depot should be done in the context of an area-side study. The Clarksburg Plan is not the appropriate vehicle for designating suitable sites for County facilities which serve the larger Upcounty area.
Kathie Hulley, Individual	Note that a bus maintenance depot should not be so far from the children it will service. Site 30 is not a suitable site. If the County did not own Site 30, it would never be considered suitable.	See comments above.

REVIEW OF TESTIMONY (ORAL & WRITTEN) OF PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: TEN MILE CREEK AREA

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Site 30, 300 acres</u>		
Richard Strombotne (CCA and Jeane Onufry, CAC and CCA	Oppose the location of the school bus maintenance facility on Site 30. Note prohibitive operating costs of disbursing 450 buses from the northern-most portion of the County. Note detrimental environmental impact of impervious surfaces and possible contamination of Ten Mile Creek and Little Seneca Lake.	See comments above.
Paul Majewski, Member of CAC	Prefer the school bus maintenance facility be removed from the Planning Area since everything drains into Seneca Lake.	See comments above.
John Delaney, Stidell/Shiloh Church Properties	Suggest that BNP's should be employed by the County for Site 30.	Agree.

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

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TOPIC: CABIN BRANCH NEIGHBORHOOD

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Character and Intensity</u>		
Jennifer Jordan Individual	Notes development is inappropriate for this neighborhood because of the natural environment and wetlands.	<p>The plan does recognize the environmental features of this area and the importance of preserving them, particularly the west fork of Cabin Branch because of its high water quality and tree cover.</p> <p>The area also has many development opportunities, however, including access to an existing interchange along I-270 and a proposed future interchange to the south.</p> <p>Staff does recommend reducing the Plan's recommended densities for the neighborhood to help provide more detached units (as was done at an earlier worksession on the Newcut Road Neighborhood).</p> <p>Staff continues to recommend that this neighborhood be designated a YDR receiving area to help implement County policies regarding farmland preservation.</p>
John King, Property Owner	Recommends reduced housing densities in this area. The lower densities in this area would be partially offset by allowing development south of W. Old Baltimore Road and by more fully utilizing the MD 121 corridor by allowing development in the portion of the Ten Mile Creek area immediately adjacent to MD 121.	See comments above.
Ellen Brammer and Susan James, Clarksburg Estates	Recommend that housing densities be sharply reduced in this neighborhood.	See comments above.

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: CABIN BRANCH NEIGHBORHOOD

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
<u>Employment Uses</u>		
Steve Orens, Clarksburg Triangle Property, 517 acres	<p>Supports some limited R1D uses west of I-270, both north and south of MD 121. This use is more appropriate in the high noise impact areas adjacent to I-270 than any type of residential development. It is a better alternative than the noise barrier walls which have been found necessary in many areas of the County. Limited industrial uses in this area are also consistent with the County's arguments to justify the Detention Center.</p> <p>Opposes single-family residential uses fronting I-270 on the CT property. Notes it is environmentally unsuitable due to noise and air quality for single-family residential and noise contour levels will require huge buffer walls along I-270.</p> <p>Proposes employment for the CT property that will balance the development pattern along I-270, as opposed to all employment and the most intensive growth east of I-270.</p> <p>Note 1968 Clarksburg Master Plan establishes the I-270 frontage land of the CT property as suitable for employment.</p>	<p>There is enough employment capacity on land already zoned for employment in Montgomery County to meet needs until at least 2040. Clarksburg already has more than 2 million sq. ft. of potential employment east of I-270.</p> <p>Setbacks will be required regardless of whether land use is residential or employment. Noise walls will not be necessary for new development because of setback standards.</p> <p>Future development is concentrated east of I-270 because of the superior road network and proposed transit system. The west side is not proposed for major road improvements and lacks direct north-south connection to Germantown other than I-270.</p> <p>The 1968 Clarksburg Plan assumed a connection to Germantown on the west side of I-270. This is no longer shown in the Germantown Master Plan, thus altering a basic transportation assumption of the 1968 Plan.</p>

SUMMARY OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

TOPIC: CABIN BRANCH NEIGHBORHOOD

NAME AND ORGANIZATION

SUMMARY OF STATEMENT

STAFF COMMENTS

Individual Properties (See attached Map)

Steve Orens, Clarksburg Triangle Property,
517 acres

Proposes residential use for the CT property that emphasizes single-family detached units and semi-detached units that are single-family in character. Proposes density at 6-8 du/ac and garden apartments on the interior sites, and a modest proportion of townhouses. Proposes a transit-serviceable community with a grid street pattern. Proposal includes: a 200-room hotel; an elementary school; religious and civic space; a 200-space park and ride lot for MARC; and a neighborhood shopping complex.

The general development program suggested by the property owner is consistent with the Plan with several exceptions: 1) The inclusion of 2-4 million sq.ft. of employment (see Employment Uses discussion); 2) The location of retail uses at the southwest edge of the property, separate center where higher densities are clustered; 3) The proposal to include a hotel; and, 4) The percentage of apartments exceeds the staff recommended housing mix (31% compared to 10-20% recommended by staff).

Proposes minimal disturbance within the stream valley buffers and wetlands on the CT. Localized on-site dry stormwater management ponds may be built within the stream valley buffers, conveyed by a storm drainage system. Proposes conserving existing tree cover in the stream valley buffers.

Staff continues to recommend the land-use pattern proposed in the Preliminary Draft Plan.

Believes the Plan proposal for single-family detached units at 2-4 du/ac for the CT property is unaffordable and wasteful. The property should be made available for units on more compact lots, comparable to the R-60 pattern.

No disturbance of the regulatory stream buffer should be proposed unless it is absolutely essential and unavoidable. Staff proposed an expanded buffer area outside of the regulatory buffer where on-site stormwater management may be placed.

Suggests PD or RMX-1 zoning for the residential and commercial areas. Believes R-200/RMX-1 with TDR's (maximum potential of 1000 TDR's) is not appropriate. Significant utilization of TDRs will involve another cost element to make the goal of affordable housing unattainable.

SUPPORT OF MAJOR ISSUES RAISED AT THE PUBLIC HEARING ON THE
PRELIMINARY DRAFT CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA
MARCH 23, 1992 AND APRIL 2, 1992

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TOPIC: CABIN BRANCH NEIGHBORHOOD

NAME AND ORGANIZATION	SUMMARY OF STATEMENT	STAFF COMMENTS
John Linthicum, John Corman, and Sue Carter, Reid Farm	Recommend continuing R-200 zoning and sewer for the Reid Farm. RC zoning with septic is a lost opportunity in terms of underutilized infrastructure, transit serviceability, environmental concerns, creative design, variety of unit types and price ranges, and IPDU's.	West Old Baltimore Road is the logical transition between Cabin Branch Neighborhood and the low-density development characterizing the neighboring Boyds Planning Area. Compatibility with the large lot residential development to the south is a major concern. A low density rural zone is appropriate, especially one that permits clustering in the event sewer service becomes available. R-200 is not appropriate.

- C. **Background Materials for PHED Committee
Worksession #5: Clarksburg Master Plan Land Use
Issues in Ten Mile Creek Sub-Drainage Basin (December
3, 1993).**

MEMORANDUM

December 3, 1993

TO: Planning, Housing and Economic Development Committee (PHED)
FROM: Marlene L. Michaelson, ^{MSM} Senior Legislative Analyst
SUBJECT: Worksession: Clarksburg Master Plan

This will be the PHED Committee's fifth worksession on the Clarksburg Master Plan. Today's worksession agenda is as follows:

- I. Signature Sites in Town Center
- II. Ten Mile Creek Area
- III. Cabin Branch Neighborhood

A summary of the public hearing testimony related to each of these issues was prepared by Planning Staff and is attached at circles 2 to 6. Circle 1 is a map showing the location of each of the eight analysis areas in the Master Plan.

I. Signature Sites in Town Center

At previous PHED Committee meetings, the Committee discussed the possibility of additional signature sites for employment along I-270. The Committee added an additional site in the Cabin Branch Neighborhood and deferred its decision on whether to add signature sites in Town Center and in the Ten Mile Creek Area pending additional analysis by Planning Staff. This analysis is attached at circles 12 to 22 but was not received in sufficient time to allow for Council Staff review prior to the preparation of this memorandum.

As the Committee will recall, Councilmember Adams asked Planning Staff to consider whether it would be possible to put commercial uses in the Town Center District in the area adjacent to I-270 and cap impervious surfaces as a means of minimizing the environmental impact. This area is in the headwaters of Ten Mile Creek. (Councilmember Adams also asked staff to consider the possibility of housing west of I-270 with R&D at the rubble-fill site; this is addressed below.)

Although staff did not have the opportunity to view the Planning Staff analysis prior to writing this memorandum, it is staff's understanding that a change from residential to commercial in Town Center with a cap on impervious surfaces could be accommodated and may even be preferable from an environmental perspective as compared to the Planning Board Draft's recommendations due to the reduction in impervious surfaces and the difference in grading requirements. There are several questions which the Committee may want to address at the worksession:

- Will it be feasible to build signature office buildings with the proposed limits on impervious surfaces?
- How will office uses compare to high density residential uses in terms of the success of Town Center? of transit?
- How would government implement and enforce a cap on impervious surfaces?

II. Ten Mile Creek Area

The Plan's recommendations for the Ten Mile Creek Area is discussed on pages 84-90 of the Plan. A map showing proposed land uses is shown on page 85 of the Plan. A map showing the major property owners is shown on circle 7 of the packet.

The Plan recommends that the area west of Ten Mile Creek be placed in the Agricultural Reserve and those areas east of the Creek be zoned rural residential at a density of one unit per five acres (using Shiloh Church Road as the zoning boundary). The Council received testimony from many property owners affected by these recommendations; the testimony is summarized on circles 2 to 6. The discussion below is divided into three sections: A. Areas Recommended for Rural Residential Zoning; B. Areas Recommended for Agricultural Reserve; and, C. Site 30.

A. Area Recommended for Rural Residential Zoning

The area recommended for rural residential zoning extends north of MD 121, west of I-270, and east of Shiloh Church Road. The Plan's recommendations for this area are based predominantly on environmental conditions. At its first worksession, the Committee was briefed by Planning Staff on the constraints affecting this area. Planning Staff highlighted their reasons for protecting the Ten Mile Creek Area as follows:

1. Although Ten Mile Creek is similar in quality to Little Seneca Creek, the topography and soil in the Ten Mile Creek area, particularly the steep slopes, make this tributary more likely to be damaged if the surrounding area is developed. The lack of existing development and existing tree cover in the Ten Mile Creek Area also makes it more likely that this area can maintain higher quality if left undeveloped than Little Seneca Creek.

2. Due to the environmental constraints throughout the planning area, Planning Staff believe it is best to only develop limited portions of the planning area. They chose the east side, not only due to differences in environmental characteristics, but also due to the existing development on the east side (e.g., the historic district, Comsat) and the existence of public utilities.

3. While Planning Staff believe that the policy goals of achieving a successful Town Center and allowing public uses at Site 30 justify some potential harm to Ten Mile Creek, they do not believe that justification exists for development in other areas in the subwatershed. They note that any additional development presents a greater risk than they believe is prudent.

The option that Councilmember Adams asked staff to consider would increase density in the 121 Northern Corridor area, while decreasing densities in Town Center and capping density at Site 30. Planning Staff will be prepared to comment at the worksession on the likely environmental impacts of this proposal. While it may be possible to shift densities without significantly affecting the overall impervious levels, there are other factors which must be considered such as the merits of sewerage the Ten Mile Creek area. The Committee should also consider whether the policy objectives in the Plan support these shifts in density and development patterns. The Plan allows for the level of development it does in the Ten Mile Creek area related to only two public policies: the development of a successful Town Center and public use for Site 30. The proposed reallocations would be contrary to these policies.

In addition, the alternative proposal would rely on a variety of measures to cap impervious surfaces, to monitor water quality and to stage development related to water quality. These are untested measures which may succeed but do introduce a further element of risk.

Staff believes that the Committee should consider the proposal to increase development in Ten Mile Creek independent of its decisions on Site 30 and Town Center. Considered independently, it is staff's belief that the information provided in the Plan does not provide any conclusive evidence that additional development would definitively result in irreparable harm to Ten Mile Creek, nor have the property owners presented any conclusive evidence to show that it would not. Nor does staff believe that the Council will receive any further information during the course of this Master Plan that will resolve this issue. This will be a judgment call the Council must make without conclusive evidence one way or the other.

The Master Plan concludes:

"Although without better monitoring data and modeling, it is difficult to predict at what point physical, chemical and biological thresholds for Ten Mile Creek would be reached, this Plan concludes that additional residential development east of Ten Mile Creek would certainly degrade existing water quality and may affect state standards for Class IV streams."

Given the uncertainties, staff recommends endorsing the low densities recommended in the Plan at this time. If in the future information becomes available to support the property owners' contention that this site can be developed at a higher density without significant environmental damage, then the recommendation can be reconsidered and density increased. If, however, the property is allowed to develop at a higher density than recommended by the Plan and it is later learned that those densities do cause significant environmental degradation, it may not be possible to reverse the decision or undo the damage.

The Council also received testimony suggesting that this area be added to the Agricultural Reserve both from those who believe it is appropriate for agricultural zoning and those who believe RDT zoning is appropriate only if it is not recommended for higher density development. As the Executive noted, if this area is not sewered it is not likely to achieve even the Master Plan recommended density of 1 unit per 5 acres. Staff would only endorse this option if the Council is certain that they do not wish to reconsider a higher density for this property in the future. Staff believes that it would be contrary to the County's agricultural programs to use the RDT zone as a holding zone for potential future development and that a decision to zone a property RDT should be a permanent one. If the Council wants to maintain the option of potentially rezoning this property to a higher density at a future date when additional environmental information becomes available, then the Master Plan recommended density is the appropriate one.

B. Areas Recommended for Agricultural Reserve

Page 84 of the Plan describes the Plan's rationale for keeping the area west of Ten Mile Creek as part of the Agricultural Reserve. The Plan notes that:

"Although the suitability of soils for farming varies from poor to good (see Figure 35), the importance of this area to County-wide agricultural preservation is significant because it forms a critical transition from the I-270 Corridor to the very productive farmland of western Montgomery County."

The Council received testimony from numerous groups and individuals (including some property owners) who supported this recommendation, both from an agricultural and environmental perspective. The Council also received testimony from several property owners who objected to this recommendation.

One group of 18 property owners in the area recommended for RDT zoning referred to as the "Sidell/Shiloh Church Property Owners," (see map on circle 7) objected to the Plan's recommendations for several reasons including the following:

- o The property was zoned R-200 in 1958; that zoning was confirmed in several planning documents that have been adopted since that time.
- o The suitability of the soil for agriculture is poor.
- o It is inappropriate to zone property RDT to serve as a "transition" between more productive farms and developed land.
- o All three stream tributaries are "affected by the same environmental constraints," yet are treated differently in the Plan.
- o The applicant's proposal for 0.6 d.u./acre on one-third of the areas would better protect Ten-Mile Creek than 25-acre farms.
- o The proposed rezoning would be a taking of land without just compensation.
- o If Site 30 is allowed to develop, then these properties should also be allowed to develop.

Additional comments received from property owners added the following reasons for not downzoning this area. RDT zoning would: reduce potential transit ridership, deprive the County of single-family homes, and fail to make efficient use of existing and nearby infrastructure. It was also noted that Ten Mile Creek is not fragile or pristine, that farms generate more pollution than light density residential zoning, that there is more farmland zoned for agriculture than is being farmed and that the County should not promote this low wage industry.

The Committee may want to ask Planning Staff to address some or all of these statements. Staff notes that many of these concerns affect properties throughout the Agricultural Preserve and are not unique to the Ten Mile Creek area.

Council also received testimony from individual property owners not included in the Sidell/Shiloh Church Property Owners Group including the following (see map of property owners on circle 7).

The Romano property: This 9.6 acre property is located at the northwest quadrant of Comus Road and I-270. The property was purchased in 1992 as a location to relocate a construction business. The owner claims he was not properly informed of the Master Plan and that his business would not require sewer. Staff recommends that the Committee explore with Planning Staff the merits of his request to retain the I-3 zoning on this small property at a major intersection, particularly since the property on the east side of I-270 is recommended for industrial uses.

Comus Industrial Park Joint Venture: This 152 acre property is located in the northwest quadrant of Comus Road and I-270. The property was rezoned I-3 in 1969 and the owner objects to the downzoning to RDT. The Committee considered this property in its earlier discussions of signature sites and did not support a signature site at this location.

Burdette Property: This 78-acre farm is located west of Shiloh Church Road. The property owner objects to the RDT zoning and believes the site is appropriate for R-200 zoning and that the County needs more affordable housing.

Mease Property: This 100 acre farm is located west of Shiloh Church Road. The property owner wants to keep the entire area west of Ten Mile Creek in the Agricultural Reserve (as opposed to rural zoning) so the owners will have an opportunity to sell TDRS.

The Council also received testimony suggesting that Ten Mile Creek, rather than Shiloh Church Road should serve as the boundary for the Agricultural Preserve. Planning Staff caution against using a creek as a zoning boundary since it can meander and change over time.

C. Site 30

The Plan's recommendations for Site 30 appear on pages 88-90 of the Plan. The Plan notes that site 30 will be the location of the Seneca Correctional Facility and that other public uses could be accommodated on this site. The Plan makes various recommendations regarding the greenway proposed along Ten Mile Creek, the Moneysworth Farm historic site, transitions, access to the property, and sewer and water.

One of the points made in testimony is whether it is equitable to treat County-owned property differently than privately-owned property and allow Site 30 to develop when surrounding properties will be zoned rural residential. This is a complex issue without a simple answer; however, it is staff's belief that the public purpose for which the site will be developed must be weighed against the public purpose for restraining development. Staff believes that public property need not always be treated identical to private property, nor does staff believe it should be exempt from all restrictions placed on privately owned land. Instead, a careful case-by-case balancing of policy objectives must be considered. Staff rejects the idea that if for legitimate policy reasons the County allows development in Town Center or at Site 30, that it must also allow similar levels of development in other areas in Ten Mile Creek.

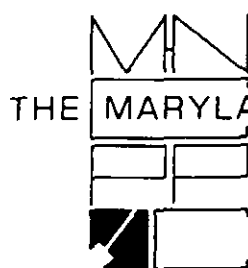
The Plan recommends a well defined planning process be established to determine whether a proposed public facility is appropriate for Site 30. This process would include the following:

- o "Appointment of a citizen advisory group as well as a technical advisory group to evaluate proposed public uses.
- o Preparation of a draft plan for review and comment by the community and presentation of the plan at a public meeting.

Implementation Strategies

Staging Recommendations: Background Materials

- A. Letter dated April 19, 1994 from Planning Board to Chairman, Montgomery County Council Planning, Housing and Economic Development (PHED) Committee explaining Planning Board staging recommendations.
- B. Clarksburg Master Plan Staging Options Report, prepared by Montgomery County Planning Department, April 1994.
- C. Discussion of Pancar Property
- D. Fiscal Impact Analysis-Executive Summary



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

(301) 495-4605

April 19, 1994

The Honorable William E. Hanna, Jr.
Chairman
Planning, Housing and Economic Development Committee
Montgomery County Council
Stella B. Werner Council Office Building
100 Maryland Avenue
Rockville, MD 20850

Dear Mr. Hanna:

On Monday, April 18, 1994, the Montgomery County Planning Board discussed staging options for the Clarksburg Master Plan. As part of the Planning Board worksession, key individuals whose properties are affected by the staging recommendations participated in a roundtable discussion with the Planning Board regarding the staging options. Representatives from the Office of Planning Implementation (OPI), the Clarksburg Citizens Advisory Committee, and the environmental community were also included in this discussion. The list of participants is attached (Attachment 1).

The four staging options reviewed by the Planning Board are described in the attached Staging Options Report, prepared by the Montgomery County Planning Department staff.

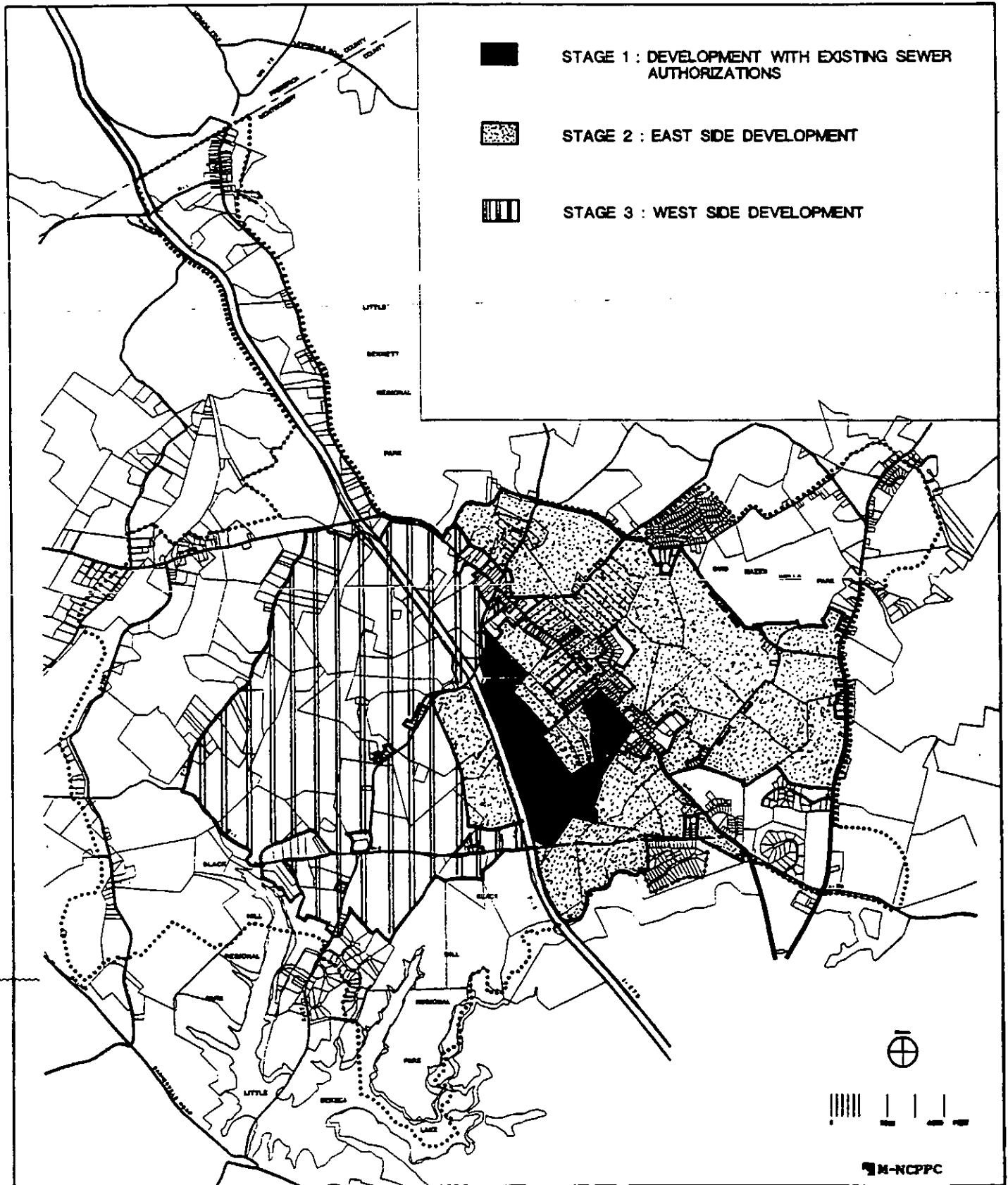
The Planning Board voted to recommend Staging Option 3: East Side Priority, with modifications. Commissioner Richardson preferred Option 4: Pay as You Go Development (see Attachment 2).

PLANNING BOARD RECOMMENDATION: MODIFIED OPTION #3--EAST SIDE PRIORITY

Staging Option 3: East Side Priority is illustrated in Figure 1. The key characteristics of this option are:

- * A limited Stage 1 area that reflects the lack of sewage conveyance to and treatment capacity at Seneca Wastewater Treatment Plant.
- * A Stage 2 area that includes all areas east of I-270 that are not in the Ten Mile Creek watershed and a portion of the Cabin Branch neighborhood.

Staging Option 3: East Side Priority



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- * A Stage 3 area that includes the remainder of the Cabin Branch Neighborhood, Ten Mile Creek East areas, and those portions of the Town Center District that drain into the Ten Mile Creek watershed.

As noted in the Staff Options Report:

This option stages development in response to a number of the fiscal, community building and environmental limitations of the area while still allowing for ample residential development over the next decade. About two-thirds of the proposed residential units for Clarksburg would be allowed to proceed with development in Stage 2.

The Planning Board approved the following modifications be made to this option:

- * Defer retail/commercial development in the Newcut Road Neighborhood until Clarksburg's Town Center concept has been established.
- * Encourage the early development of the Town Center by endorsing a temporary pumpover of wastewater from the Town Center to an existing trunkline if the more extensive projects needed to serve Stage 2 do not proceed in a timely manner.
- * Encourage residential development patterns that best support a strong Town Center identity early in Stage 2. For example, residential development in the Newcut Road Neighborhood should be phased so that development closest to the Town Center proceeds first.
- * Modify dwelling unit/employment capacity allocations for the I-270/MD 121 Interchange to allow for more residential development and less employment allocation during Stage 2.
- * Allow enough staging flexibility to allow some residential development on portions of the Cabin Branch neighborhood closest to the I-270/MD 121 Interchange to proceed in Stage 2.

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IMPLEMENTATION ISSUES

The Planning Board discussed how to best implement the above staging options and recommended that the Comprehensive Ten Year Water and Sewerage Systems Plan be the major implementation tool for staging. Elizabeth Davison, who participated in the Worksession, expressed the County Executive's agreement to this approach.

I would like to underscore the Planning Board's recommendation that if an appropriate amendment to the Comprehensive Ten-Year Water and Sewerage Plan has not been prepared and adopted by County Council at the time of the Sectional Map Amendment, then zoning strategies to implement the Staging recommendations will have to be considered. Again, County Executive staff have made a commitment to amend the Comprehensive Ten Year Water and Sewerage Plan so we are all hopeful the SMA will not become an staging implementation tool.

STAGING AND FDA SELECTION

Finally, the Planning Board briefly discussed the issue of how the site selection process for FDA might affect the Clarksburg staging recommendations. One candidate site, the 530-acre Clarksburg Triangle property, is located in Clarksburg. The Planning Board clearly intends the Clarksburg Master Plan to be supportive of the County's efforts to find a suitable location for FDA. The Planning Board requested staff to work closely with OPI to draft language for inclusion in the Master Plan; this language will be completed by Thursday for PHED Committee review.

ADDITIONAL CLARIFICATIONS

The recommended staging triggers for the four options are briefly described in the tables on pages 11, 14, 17, and 20. Due to the limited space provided by the tabular format, a number of clarifications may be in order. Planning Board staff will forward these clarifications to the Council shortly.

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The Planning Board looks forward to working closely with you on this important planning issue.

Sincerely,

A handwritten signature in cursive script, appearing to read "William H. Hussmann".

William H. Hussmann
Chairman

WHH:LC:MCB:dws

Attachment

ATTACHMENT 1

PANEL PARTICIPANTS

NAME	REPRESENTING
Dick Strombotne	Clarksburg Citizens Advisory Committee
Elizabeth Davison	Montgomery County Executive Branch
Sue Richards	Montgomery County Executive Branch
Randy Slovic	Sierra Club
Don Maxie	Ten Mile Creek Civic Association
Art Rosenberg	Newcut Consortium (Kingstead Manor Property)
David Flanagan	Newcut Consortium (Clarksburg Village Partnership Property)
Phil Perrine	Newcut Consortium (DiMaio Property)
Kevin Rogers	Newcut Consortium (Kingstead Manor Property)
Robert G. Brewer	Newcut Consortium (Kingstead Manor Property)
John Westbrook	Bowis & Funt Properties
Steve Klebanoff	Piedmont Land Associates/Clarksburg Land Associates
Steve Kawfman	Piedmont Land Association etc.
Malcolm D. Rivkin	Clarksburg Triangle
Steve Orens	Clarksburg Triangle
Mark Friis	Linthicum Farm
John Cook	Winchester Homes
Roger Bain	Clarksburg Triangle
Tony Natelli	Northern MD Route 121 Group

ATTACHMENT 2

COMMISSIONER RICHARDSON'S MINORITY OPINION:

As noted earlier, Commissioner Richardson is supportive of a modified version of Option 4: Pay As You Go Development that would place a priority on the development of a strong, vital Town Center. He prefers the Pay As You Go option throughout the planning area once the Town Center has been established. Commissioner Richardson is particularly concerned that none of the options place enough emphasis on the existing MARC passenger rail station at Boyds and believes that a market approach coupled with existing growth management tools (APFO, AGP, Comprehensive Water and Sewer Plan) will best encourage maximum developer contribution to planned infrastructure needs.

CLARKSBURG MASTER PLAN

Staging Options Report

Prepared by the Montgomery County
Planning Department

April 1994

I. INTRODUCTION

When considering staging options for Clarksburg, the Planning Board's (Final) Draft Master Plan noted:

The development of Clarksburg will make a significant contribution to the County's long term housing needs, especially in terms of single-family detached homes. This fact argues for the early development of Clarksburg.

At the same time, a significant amount of infrastructure will be needed to implement this Plan, including new interchanges along I-270, new highways, schools, a library, and parks. A fiscal impact analysis done by the Montgomery County Office of Planning Implementation might affect the County's overall fiscal planning strategy.

The Planning Board recommended a two-prong staging strategy for Clarksburg to respond to both these fiscal uncertainties and multiple land use concerns. The Master Plan includes two options with regard to staging:

Option A assumes that new revenue mechanisms are in place or imminent and that public funds are available for the public share of funds required for infrastructure to serve the Planning Area and therefore does not recommend staging. Option B assumes that financing is not available and that staging will be required. The description of Option B includes principles related to staging but does not include a staging plan (See Attachment #1).

Concern about the County's ability to finance Clarksburg has also been underscored by the Council's Planning, Housing and Economic Development (PHED) Committee. As they stated:

"The PHED Committee unanimously agreed in its view that financing is not available or imminent but we did not direct Planning staff to prepare a staging plan at the worksession. Council staff has discussed this issue with my two colleagues on the PHED Committee and they concur with my judgment that Planning Staff should draft a staging plan that will be completed in time for the full Council's worksession on this issue. If the council decides that staging is necessary, it is imperative that they have options before them for text to add to the Master Plan that would describe a specific staging plan."

This Report responds to the PHED Committee's request for specific staging options. It first provides a set of six guiding principles which serve as the foundation for staging in Clarksburg. Then, four different staging options are presented together with an evaluation of their strengths and weaknesses.

II. GUIDING PRINCIPLES

During the Clarksburg Master Plan worksession regarding staging (June 3, 1993), the Planning Board supported a set of 12 preliminary guiding principles for staging policies in Clarksburg (See Attachment #1). These principles primarily addressed issues related to land use planning, fiscal concerns, and the housing market.

Since that time, additional information related to wastewater treatment and transmission facilities, transportation infrastructure, water quality protection, and community development has become available. Furthermore, the PHED Committee has proposed changes to the Planning Board's (Final) Draft Plan. In response to this new information, staff revised the earlier guiding principles and reviewed a wide range of possible staging options for Clarksburg. The updated guiding principles are presented as follows:

- 1) Wastewater treatment and transmission limitations.
- 2) Fiscal concerns.
- 3) Coordination of land development and public infrastructure.
- 4) Development of a strong community identity.
- 5) Market responsiveness.
- 6) Water quality protection.

One of the greatest difficulties in developing a staging plan for Clarksburg is that each of the principles is in and of itself very important, however, the principles can and do at times conflict with one another. Thus, the ultimate selection of a final staging option will depend, to a large degree, on the priority given to each of these guiding principles. The principles are presented in detail as follows:

PRINCIPLE #1: WASTEWATER TREATMENT AND TRANSMISSION LIMITATIONS

Sewerage treatment and transmission capacity in the Seneca Creek Basin is severely constrained and will limit any new development in Clarksburg in the foreseeable future.

According to WSSC..."The sewerage system in the Seneca Creek drainage basins provides sewer service to areas such as Germantown and some portions of Gaithersburg. In addition, this system will be extended in the future to provide sewer service to Clarksburg. The sewer system within the Seneca Creek Basin consists of gravity sewers, pumping stations, and force mains. Ultimately, this system converges at the Seneca wastewater Treatment Plant (WWTP) and the Wastewater Pumping Stations (WWPS) complex on Great Seneca Creek."

The Seneca Creek sewage system is currently experiencing capacity problems in two key areas:

Wastewater Transmission: There are currently several bottlenecks in the sewerage system within the Seneca Creek Basin that inhibit getting wastewater flows from their source to the Seneca WWTP/WWPS complex. A variety of projects are programmed within WSSC's approved CIP to augment or relieve existing pipelines and facilities. These projects will provide long-term solutions to the wastewater transmission problems in the area and are expected to be completed within the next 5 years.

Wastewater Treatment: According to WSSC..."the Seneca WWTP/WWPS complex is currently operating at capacity" and is unable to serve any properties that have not already received sewer authorizations from the WSSC. Current projects in the CIP will provide only very short term relief to the serious treatment capacity problems at the Seneca WWTP/WWPS complex. The incremental capacity provided by these projects will only reduce the amount of time the plant spends in operating over capacity, as opposed to actually increasing the plant's capacity to handle new development (Additional information regarding wastewater treatment and transmission problems in the Seneca Creek Basin is highlighted in Attachment #2).

WSSC staff have observed that "in order to meet the County's future wastewater needs in the Seneca Creek Basin, additional major wastewater treatment projects are required. These additional projects are the subject of the WSSC Strategic Sewerage Study and the upcoming Seneca/Potomac Issues Report." Currently, no specific solution to the Seneca Creek wastewater treatment problem has been agreed upon. Staff estimate that a viable solution to the Seneca Creek wastewater treatment problem is at least 5 to 8 years away. The most optimistic outlook suggests that if a decision regarding a wastewater transmission solution is reached within the next few months, the project/s could be programmed into the 1997 CIP. The estimated construction time for facility improvements is 5 years, which would suggest that if all proceeds well, a treatment solution would be in operation by the year 2002.

Limited wastewater treatment and transmission capacity is clearly a constraint to further Clarksburg development until an appropriate solution to the Seneca Creek treatment plant's problems is found and programmed into the CIP. County policy does not, and should not, allow private community systems to be provided. The extension of sewer service to new areas is a critical element of the staging recommendations in all four staging options. Specifically, all four staging options recommend that no new development, beyond that which has already received sewer permit authorizations (COMSAT, Gateway 270, and the new elementary school), should proceed until a wastewater treatment solution is in place.

PRINCIPLE #2: FISCAL CONCERNS

The timing and sequence of development in Clarksburg should be responsive to the County's limited ability to fund capital improvements required by new growth in the area.

The Office of Planning Implementation's (OPI) fiscal impact analysis of Clarksburg (August, 1993) concluded that the capital program needed to serve new growth in Clarksburg between 1995 and 2015 would cost approximately \$250 million. OPI estimated that using currently adopted rates, the Construction Excise Tax could raise about \$36.8 million from new development in Clarksburg, and property and income taxes could contribute another \$124 million towards debt service over 40 years. This total contribution of \$160.8 million from adopted revenue sources still falls almost \$90 million short of providing the necessary revenues to fund the proposed capital program. Furthermore, operating costs were not reflected in the study.

In response to these findings, OPI has indicated...

"...a market phased development of Clarksburg would impose a significant burden on the County's capital bonding capacity. To fund the facilities needed to serve development in Clarksburg, the County must find more revenue either from other areas of the County or from nontraditional funding sources, such as development districts, impact taxes, or the Construction Excise tax." (pg. 24 of the Clarksburg Fiscal Impact Analysis)

Presently, enabling legislation for the use of development districts as a mechanism for financing public infrastructure improvements is being considered by both the state legislature and the County Council. Considerable uncertainty still exists concerning the exact nature of development districts as a financing mechanism and the County's ability to rely on this tool to reduce its share of capital improvement costs. Some fiscally-oriented policy questions that remain to be answered include:

- * Can the County afford its share of capital improvements even if an alternative revenue source, such as a development district, is available?
- * Should Clarksburg compete in any way with other portions of the County for limited public funds?
- * What pace of development can the County afford within the next 20 years if an alternative revenue mechanism, such as a development district, is in place?

In light of the considerable uncertainty that still surrounds this issue, it is clear that some degree of staged development should take place in Clarksburg over the next twenty years. Both OPI and Planning Department staff, believe that at the very least, future

development in Clarksburg should be conditioned on the ability of private developers (using mechanisms such as development districts) to fund a significant portion of the infrastructure improvements required by new growth.

The implications of this fiscal policy for staging vary depending on one's outlook on the future role of development districts or similar non-traditional financing mechanisms. An optimistic approach assumes that development districts or similar financing mechanisms will indeed be able to account for a significant portion of the \$90 million revenue shortfall projected by OPI. This approach would recommend that once a wastewater treatment solution has been implemented and development districts (or other similar mechanisms are in place), development should be allowed to proceed without delay throughout the Clarksburg area (Option 4 is an example of this approach).

A less optimistic, more fiscally conservative approach assumes that development districts or similar financing mechanisms may not be readily available in the near future or will only be able to account for a limited portion of the \$90 million shortfall. In this case, it would be wise to stage development over time in order to reduce the County's fiscal burden at any one time and to reduce fiscal competition with other parts of the County (Options 1-3 below are examples of this approach).

PRINCIPLE #3: COORDINATION OF LAND DEVELOPMENT AND PUBLIC INFRASTRUCTURE

Land development should be coordinated with the provision of major, publicly financed capital improvements such as the transportation network.

As a largely undeveloped, rural area and Montgomery County's "final frontier" in terms of the I-270 Corridor, Clarksburg can expect to see considerable development during the next twenty years. The Master Plan envisions that at final build-out, the area will include approximately 15,350 dwelling units and 8,500,000 to 9,000,000 square feet of employment opportunities. This growth will require major modifications to the area's transportation network and such significant capital improvements as the construction of M-83 (a proposed highway linking Clarksburg, Germantown, and Gaithersburg), a new regional transitway, and new or improved I-270 interchanges at Clarksburg Road (MD 121) and Newcut Road extended. New public water and sewer facilities will also need to be extended into this area once major treatment capacity problems have been resolved for the Seneca Creek Basin.

Staging policies should be developed to coordinate the timing of land development in Clarksburg with the provision of these publicly financed capital improvements. Such capital facilities can best be financed without undue burden to the County and its taxpayers if the facilities are built in a logical, rational fashion, servicing only a few compact development areas at any one time and proceeding

in later stages to build out from already developed areas in a logical incremental sequence. By this means, the County can avoid the high tax burden of scattered, piecemeal development which forces wasteful public expenditures for expensive, but underutilized public facilities.

This coordination of land development with the provision of public infrastructure is particularly important given OPI's estimated \$90 million revenue shortfall for the area. The economies of scale offered by geographic staging will enable the County to make the best possible use of the limited funding available for Clarksburg.

Furthermore, geographic staging will help guarantee that land development only will occur once such key public facilities as the Seneca Creek Wastewater Treatment Plant and the I-270/Newcut Road Interchange are in place (Planning Department staff's preliminary analyses suggest that the I-270/MD-121 Interchange is only capable of supporting 3,000 new dwelling units and 7,000 additional jobs, thus, the Newcut Road interchange will be necessary to accommodate traffic generated by development over and beyond these initial figures). The price tag associated with these items is large and was not included in OPI's estimated capital program for Clarksburg. Given the critical role that both of these facilities play, every effort should be made to ensure that their construction is a reality before development is allowed to proceed. In this way, Clarksburg can avoid the undue traffic congestion and sewerage system overload that has plagued other similar communities throughout the country.

PRINCIPLE #4: DEVELOPMENT OF A STRONG COMMUNITY IDENTITY

The timing and sequence of development should reinforce the Master Plan's community design and identity goals for Clarksburg.

The timing and sequence of development is critical to helping Clarksburg achieve its vision as a transit-and-pedestrian oriented town surrounded by open space. To help promote a strong sense of community identity and design, staging should strive to address the following:

- * The Town Center: Include the Town Center in early phases of development to create a strong sense of community identity and to provide a model for later development elsewhere in the areas.
- * The Transitway: Assure that areas planned for higher density development near transit are not preempted by less intensive uses. Promote the early development of transit-oriented land uses.
- * School-Based Neighborhoods: Provide for an adequate number of dwelling units to support at least one elementary school in each stage. The Montgomery County School District estimates that between 1,800 and 2,200

housing units are needed to support an elementary school. Also provide the County with opportunities to obtain school site dedication in each stage of development

- * Balanced Socio-Economic Mix: Provide a suitable mix of dwelling units (roughly 20% multi-family, 35% townhouse, and 40% single family) to ensure a balanced socio-economic mix for schools in the areas.
- * Coordinated Residential and Commercial Development: Provide for sufficient residential units in a stage to support local retail and commercial activities. Retailers have indicated to Planning Board staff that approximately 3,500 to 4,000 dwelling units are needed to support a retail development that includes a grocery store.

POLICY # 5: MARKET RESPONSIVENESS

Staging should respond to market demand for single family housing and provide for competition among developers.

Staging in Clarksburg should respond, as much as possible, to the growing pressures for more single-family housing in the County. Development should be staged so that a reasonable share of the County's future annual residential growth can be accommodated in Clarksburg over time.

A sufficient number of properties should also be made available for development in each stage to encourage competition among developers. This not only avoids the creation of a monopoly position by a single firm, but also provides consumers with choice in housing prices and living styles, and encourages wider experimentation in improved community design.

POLICY #6: WATER QUALITY PROTECTION

The timing and sequence of development in Clarksburg should respond to the unique environmental qualities of the area and help mitigate, in particular, development impacts to the environmentally sensitive stream valleys in the Ten Mile Creek Watershed.

As the Planning Board's (Final) Draft Master Plan notes:

"Clarksburg offers a rich array of environmental resources, including Little Seneca Lake, streams with very high water quality, a large number of stream headwaters, extensive tree stands, and an impressive array of flora and fauna, particularly in stream valleys. These resources give Clarksburg a unique character and must be protected."

In response to these environmental concerns, the Master Plan proposed that 80% of Clarksburg's future development be concentrated in one-third of the community's land area (primarily those portions of Clarksburg east of I-270 or in the less environmentally sensitive Cabin Branch Creek sub-watershed).

Since the Planning Board's (Final) Draft Plan was prepared, the PHED Committee increased residential density from rural (1 unit per 5 acres) to RE-1/TDR-2 (2 units per acre) and added two signature site facilities in the Ten Mile Creek Watershed.

Given the PHED Committee's proposed land use recommendations for additional development in the Ten Mile Creek Watershed and the fragile nature of this high quality stream valley, staging becomes an essential tool for assisting with the mitigation of development-related impacts. Delaying development in the Ten Mile Creek Watershed would allow for the development of new best management practices, mitigation techniques, and water quality monitoring technologies.

Both the Planning Department and County's Department of Environmental Protection (DEP) believe that significant changes in water quality regulation can be expected during the next few years. A new water quality zoning text amendment was recently approved by the Planning Board for transmittal to the County Council. If this new water quality review process is approved, it will be highly desirable to limit early development in Clarksburg to one or two less environmentally sensitive sub-watersheds (such as those found on the east side of I-270) so that DEP can conduct the necessary baseline stream monitoring for the proposed program and test the effectiveness of best management practices in protecting water quality.

III. BASELINE STAGING ASSUMPTIONS

All four staging options include the same baseline assumptions:

1. Not All Properties in the Planning Area Should Be Staged

The following areas or development should not be included in the staging plan:

Hyattstown: This community has health and public safety problems, which must be corrected immediately. Development in Hyattstown may proceed immediately, subject to the availability of adequate sewer and water facilities.

Rural Density Development: Rural density development, zoned for 1 unit per 5 acre densities or less, should be rezoned soon after the Master Plan is adopted. Development in these zones may proceed based on the availability of wells and septic facilities.

Previously Approved Development in the Pipeline: All options assume that previously approved development will not be addressed by the staging plan and may proceed immediately in accordance with the development review process.

The areas proposed for staging are shown in Figure 1.

2. Short-Term Wastewater Treatment and Transmission Constraints Exist in the Short-Term

All staging options acknowledge that there is limited wastewater treatment and transmission capacity available in the Seneca Creek sewerage system, and that a long term solution to Clarksburg's sewerage problems will not be in place for at least 5 to 8 years. Stage 1 is identical in all four options--it is limited to only those properties with existing sewer service authorizations (this stage is shaded in black in Figures 2-5). Specifically, this stage is limited to the development of the COMSAT and Gateway 270 properties and the new Clarksburg elementary school.

3. The Implementation of an Infrastructure Financing Mechanism Is Critical

All four staging options agree that County, State, and Federal revenues, alone, will not be able to fund the public infrastructure needed to serve future Clarksburg development. All four options presume that one or more non-traditional financing mechanisms--such as development districts--will need to be implemented before any private development can occur. This condition applies to all stages within the different staging options.

4. Staging Should Recognize a Significant Role for the Adequate Public Facilities Ordinance (APFO) and the Annual Growth Policy (AGP)

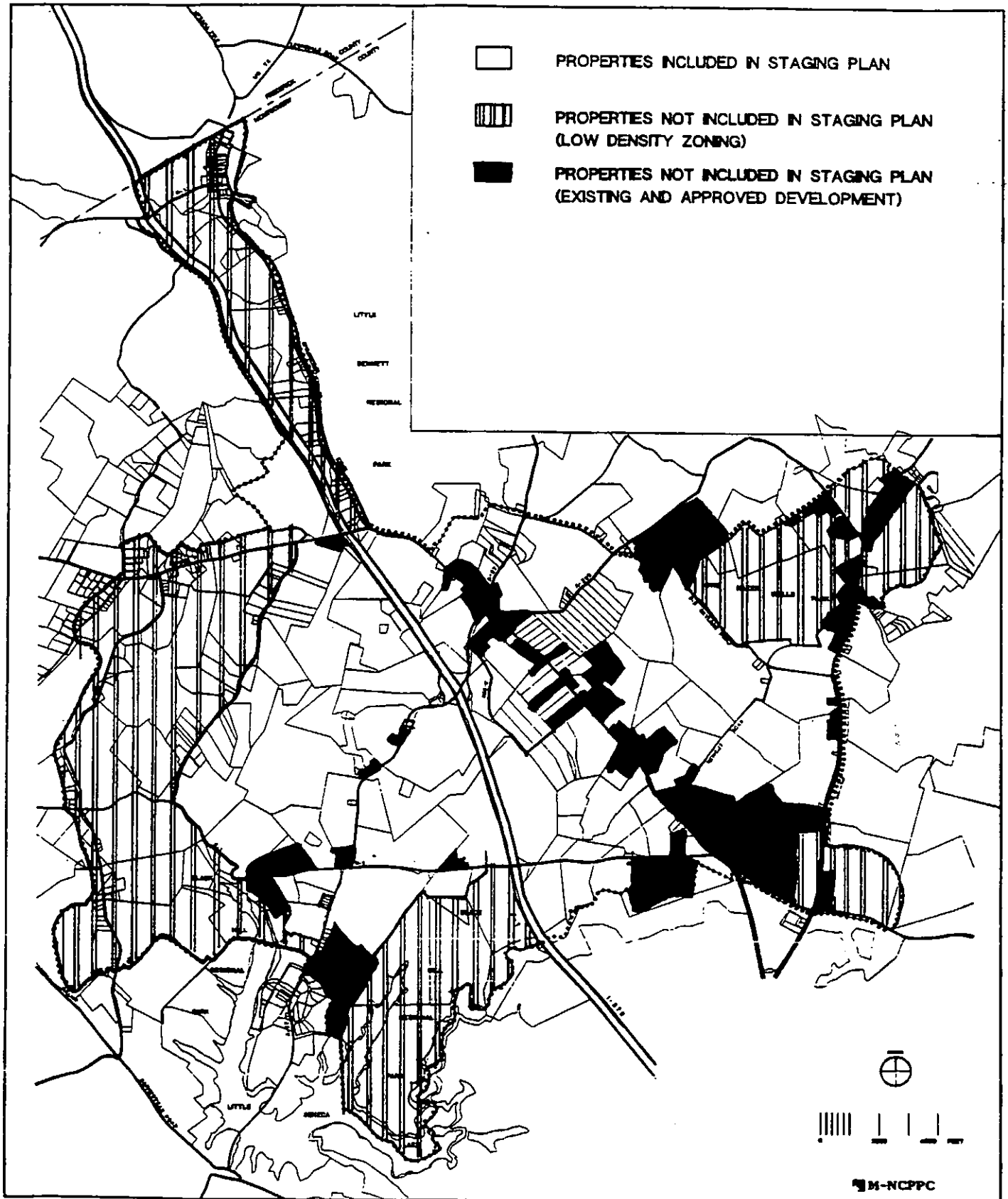
Finally, all staging options recognize the important role that the County's APFO and AGP will play in determining the amount and timing of additional growth that can be accommodated in Clarksburg. All four options advocate the development of one or more AGP policy areas for Clarksburg at the earliest date possible.

B. DESCRIPTION AND ANALYSIS OF STAGING OPTIONS

The staging options are summarized on the following pages. Four options are presented for review:

- Option 1: I-270 Employment Priority
- Option 2: Town Center/Transit Corridor Priority
- Option 3: East Side of I-270 Priority
- Option 4: Pay-As-You-Go Development

The Geography of Staging

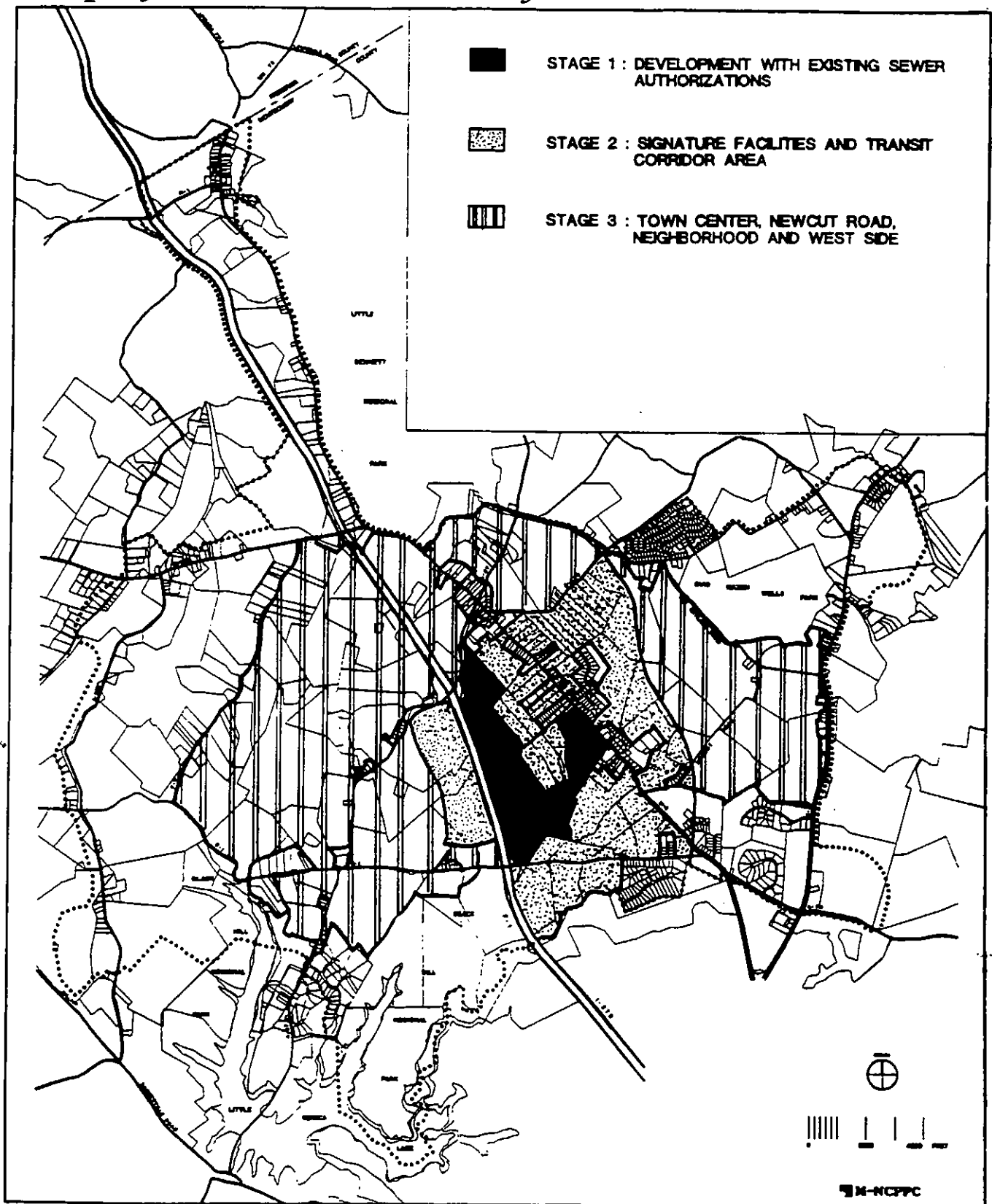


For each option, the following information is presented:

- * A map illustrating the staging recommendations.
- * A tabular summary of the options' key staging characteristics.
- * A discussion of the option's strengths and weaknesses in terms of the overall staging principles.

STAGING OPTION #1
Employment Center Priority

Staging Option 1: Employment Center Priority



STAGING OPTION 1: EMPLOYMENT CORRIDOR PRIORITY
OVERVIEW OF KEY CHARACTERISTICS

RATIONALE	DESCRIPTION	STAGING TRIGGER	IMPLEMENTING MECHANISM
<p>Gives early development priority to the Transit Corridor and signature facility properties.</p> <p>(Development districts or other non-traditional financing mechanisms will not be able to fully fund Clarksburg infrastructure costs.)</p> <p>Provide for the efficient coordination of land development and major public infrastructure improvements.</p> <p>Protect water quality in environmentally sensitive areas.</p>	<p><u>STAGE 1:</u> Development limited to those properties with existing sewer authorizations.</p> <p><u>STAGE 2:</u> Development allowed to proceed within the Comsat tributary sub-watershed, the Stringtown Creek sub-watershed, and on signature facilities not included in the Ten Mile Creek watershed.</p> <p><u>STAGE 3:</u> Development allowed to proceed within the remaining areas of Clarksburg.</p>	<p><u>STAGE 1:</u> Plan adoption.</p> <p><u>STAGE 2:</u> A solution to wastewater treatment problem is 100% programmed in first 4 years of CIP</p> <p align="center">AND</p> <p>Clarksburg Facilities Plan completed</p> <p align="center">AND</p> <p>One or more infra-structure financing mechanisms are in place.</p> <p><u>STAGE 3:</u> I-270/Newcut Road Inter-change is 100% programmed in first 4 years of CIP</p> <p align="center">AND</p> <p>One or more non-traditional financing mechanisms are in place.</p>	<p><u>STAGE 1:</u> Simultaneous area-wide SMA and Ten-Year Water and Sewer Plan amendment,</p> <p align="center">OR</p> <p>Downzoning to interim zoning categories.</p> <p><u>STAGE 2:</u> Ten-Year Water and Sewer Plan amendment or Stage 2 Area SMA depending on mechanism employed above.</p> <p><u>STAGE 3:</u> Ten-Year Water and Sewer Plan amendment or Stage 3 Area SMA depending on mechanisms employed above.</p> <p>Floating zone approvals in areas with PD, PN, or MX zoning.</p>

OPTION #1: EMPLOYMENT CORRIDOR PRIORITY**SUMMARY OBSERVATIONS**

Although this option reinforces the Council's desire to promote a suburban, employment corridor identity to the properties along I-270 in Clarksburg, it fails to respond to actual market demand in the area (which is actively calling for single family housing) and does not support the community identity goals established in the Master Plan because it does not include the Town Center.

This option is also extremely limited in terms of the amount and type of residential development which would proceed over the next 10 to 15 years.

STRENGTHS:**FISCAL ISSUES:**

- * Employment centers will be in a position to make significant revenue contributions to help fund public infrastructure.
- * Limits County's potential financial burden at any given time by geographically staging development (smaller geographic areas allow for more accurate estimates of infrastructure needs and total development costs).

COORDINATION OF LAND DEVELOPMENT AND INFRASTRUCTURE:

- * Proposed staging reflects a logical extension of sewer facilities from south to north.
- * Efficiently concentrates development near existing infrastructure (e.g. I-270/MD-121 interchange and the existing Comsat sewer line stem).

MARKET RESPONSIVENESS:

- * Allows new I-270 employment sites to develop in response to market needs.

WATER QUALITY PROTECTION:

- * Concentrates development on the East Side, which is less environmentally sensitive than the Ten Mile Creek Basin.
- * Is consistent with DEP water quality testing goals, which call for the initial monitoring of one or two limited, sub-watershed areas.

WEAKNESSES:**FISCAL ISSUES:**

- * May not provide a sufficient critical mass of development to make development districts or other public/private financing mechanisms feasible.

COMMUNITY BUILDING:

- * Short-term employment market may conflict with the Master Plan's goal of more clustered, higher intensity buildings.
- * Does not allow the Town Center to get a head start on development or to compete for the limited interchange capacity of MD121/I-270.
- * Does not provide an adequate mix of housing types to satisfy school district objectives of a balanced socio-economic mix within school service areas.
- * Does not provide enough development competition to offer a range of choice in housing prices and living styles.

MARKET RESPONSIVENESS:

- * Current market demand in Clarksburg is for single-family housing not office parks or higher density residential development.

STAGING OPTION #2
Town Center/Transit Corridor Priority

STAGING OPTION #2: TOWN CENTER/TRANSIT CORRIDOR PRIORITY
OVERVIEW OF KEY CHARACTERISTICS

RATIONALE	DESCRIPTION	STAGING TRIGGER*	IMPLEMENTING MECHANISMS
<p>Limit County's financial burdens by geographically staging development.</p> <p>(Development districts or other non-traditional financing mechanisms will not be able to fully fund Clarksburg infrastructure costs.)</p> <p>Provide for the efficient coordination of land development and major public infrastructure improvements.</p> <p>Promote the development of a strong community identity.</p> <p>Protect water quality in environmentally sensitive areas.</p> <p>Partially respond to market demand for housing.</p>	<p><u>STAGE 1:</u> Development limited to those properties with existing sewer authorizations.</p> <p><u>STAGE 2:</u> Development is allowed to proceed in the Comsat and Stringtown Creek subwatersheds and on signature facilities and portions of the Town Center not in the Ten Mile Creek watershed.</p> <p><u>STAGE 3:</u> Development is allowed to proceed in the remainder of Clarksburg.</p>	<p><u>STAGE 1:</u> Plan adoption.</p> <p><u>STAGE 2:</u> A solution to wastewater treatment problems is 100% programmed in first 4 years of CIP</p> <p align="center">AND</p> <p>Clarksburg Facilities Plan is completed</p> <p align="center">AND</p> <p>One or more financing mechanisms are in place.</p> <p><u>STAGE 3:</u> I-270/Newcut Road Inter-change is 100% programmed in first 4 years of CIP</p> <p align="center">AND</p> <p>One or more non-traditional financing mechanisms are in place.</p>	<p><u>STAGE 1:</u> Simultaneous area-wide SMA and Ten-Year Water and Sewer Plan amendment,</p> <p align="center">OR</p> <p>Downzoning to interim zoning categories.</p> <p><u>STAGE 2:</u> Ten-Year Water and Sewer Plan amendment or Stage 2 Area SMA depending on mechanism employed above.</p> <p><u>STAGE 3:</u> Ten-Year Water and Sewer Plan amendment or Stage 3 Area SMA depending on mechanisms employed above.</p> <p>Floating zone approvals in areas with PD, PN, or MX zoning.</p>

OPTION 2: TOWN CENTER/TRANSIT CORRIDOR PRIORITY

SUMMARY OBSERVATIONS

This option effectively balances competing policies related to County fiscal concerns, the coordination of land development and infrastructure, enhancing community identity and design, and protecting local water quality. While this option may not provide as much Stage 2 development potential as some would desire, it does still allow for more development than is anticipated by OPI over the next 10 years. Given the capacity limitations of both the Seneca Creek wastewater treatment plant and the proposed I-270 interchanges in this area, it is Planning staff's belief, that much additional development beyond these figures is unlikely even if no staging is provided for the area. This staging option helps assure that "market growth" is directed to the Town Center/Transit Corridor.

THIS IS THE PLANNING BOARD STAFF'S PREFERRED AND RECOMMENDED STAGING OPTION FOR CLARKSBURG.

STRENGTHS:

FISCAL ISSUES:

- * May provide a sufficient critical mass of development to make development districts or other public/private financing mechanisms feasible.
- * Limits County's potential financial burden at any given time by geographically staging development (smaller geographic areas allow for more accurate estimates of infrastructure needs and total development costs).

COORDINATION OF LAND DEVELOPMENT AND INFRASTRUCTURE:

- * Efficiently concentrates development near existing infrastructure (e.g. I-270/MD-121 interchange and the existing Comsat sewer line stem).
- * Stages land development consistently with the available capacity of critical transportation network interchanges (I-270/MD 121 Interchange and I-270/Newcut Road Interchange).

COMMUNITY BUILDING:

- * Provides for sufficient development to meet community building goals (i.e., enough residential units to support retail development and to create school-based neighborhood units).
- * Provides an adequate mix of housing types to satisfy school district objectives of a balanced socio-economic mix within school service areas.

MARKET RESPONSIVENESS:

- * Allows for some residential development so that Montgomery County can respond to market demand and begin to achieve its forecasted share of regional housing construction.
- * Provides enough development competition to offer a range of choice in housing prices and living styles.

WATER QUALITY PROTECTION:

- * Concentrates development on the East Side, which is less environmentally sensitive than the Ten Mile Creek Basin.
- * Is consistent with DEP water quality testing goals, which call for the initial monitoring of one or two limited, sub-watershed areas.

WEAKNESSES:**MARKET RESPONSIVENESS:**

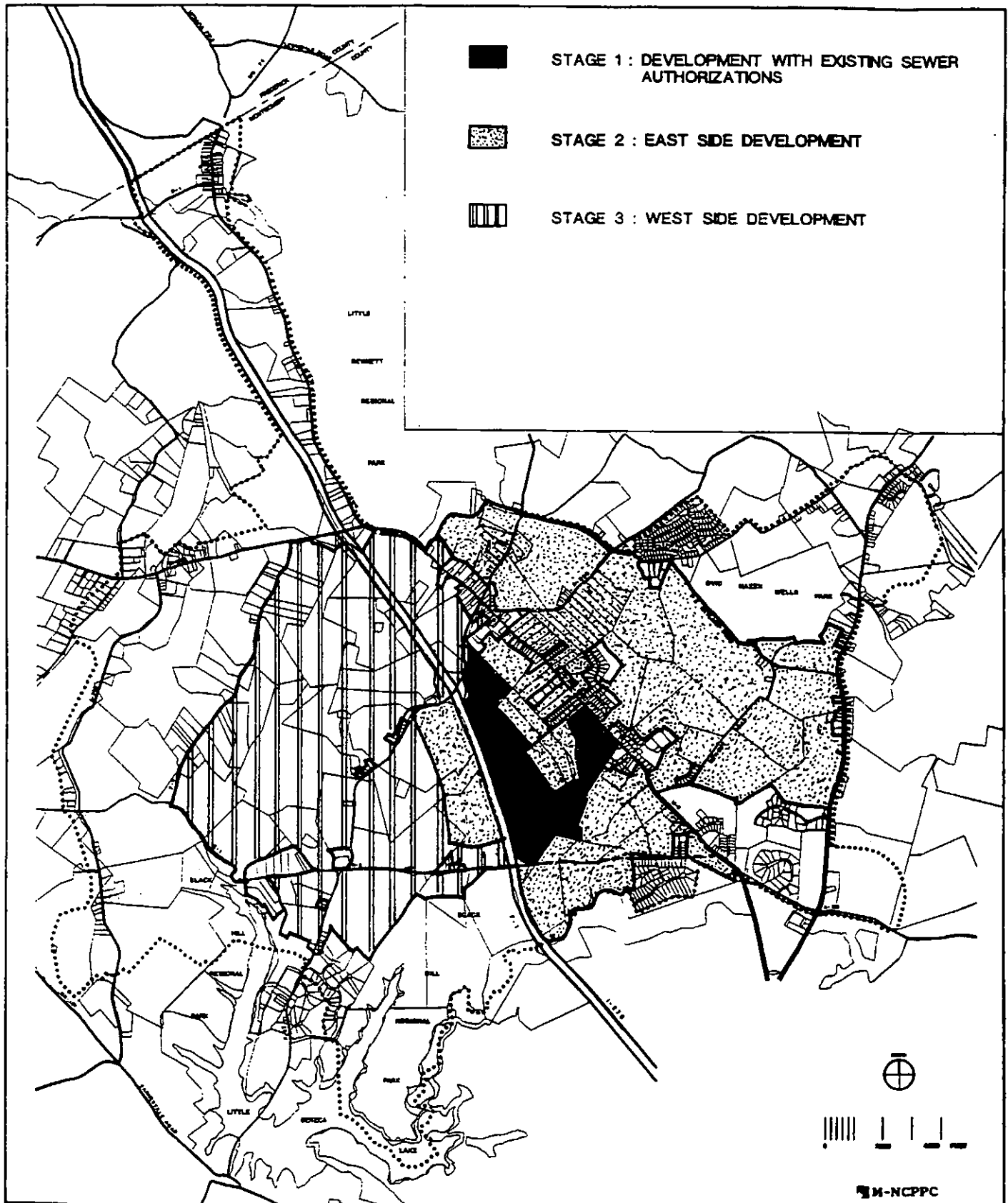
- * May be politically controversial (other developers would also like the option to go first).
- * Will split one property owner's land across two different stages (2 and 3).

WATER QUALITY PROTECTION:

- * Higher density development of the Town Center may negatively impact the water quality in the environmentally sensitive headwaters of the Little Seneca Creek drainage basin.

STAGING OPTION #3
East Side Priority

Staging Option 3: East Side Priority



STAGING OPTION #3: EAST SIDE PRIORITY:
OVERVIEW OF KEY CHARACTERISTICS

RATIONALE	DESCRIPTION	STAGING TRIGGER*	IMPLEMENTING MECHANISMS
<p>Limit County's financial burden by geographically staging development.</p> <p>(Development districts or other financing mechanisms will not be able to fund a significant portion of Clarksburg infrastructure costs.)</p> <p>Provide for the efficient coordination of land development and major public infrastructure improvements.</p> <p>Promote development of a community identity.</p> <p>Respond to market demand for single-family housing.</p>	<p><u>STAGE 1:</u> Development limited to those properties with existing sewer authorizations.</p> <p><u>STAGE 2:</u> Development allowed to proceed in the East Side (area east of I-270 that is not in the Ten Mile Creek watershed) and on signature facility sites immediately adjacent to I-270 that are not in the Ten Mile Creek watershed.</p> <p><u>STAGE 3:</u> Development allowed to proceed in the West Side (remainder of Clarksburg).</p>	<p><u>STAGE 1:</u> Plan adoption.</p> <p><u>STAGE 2:</u> A solution to wastewater treatment problem is 100% programmed in first 4 years of CIP</p> <p align="center">AND</p> <p>Clarksburg Facilities Plan is completed</p> <p align="center">AND</p> <p>One or more Eastside financing mechanisms are in place.</p> <p><u>STAGE 3:</u> I-270/Newcut Road Inter-change is 100% programmed in first 4 years of CIP</p> <p align="center">AND</p> <p>One or more Westside financing mechanisms are implemented.</p>	<p><u>STAGE 1:</u> Simultaneous area-wide SMA and Ten-Year Water and Sewer Plan amendment,</p> <p align="center">OR</p> <p>Downzoning to interim zoning categories.</p> <p><u>STAGE 2:</u> Ten-Year Water and Sewer Plan amendment or Eastside SMA depending on mechanism employed above.</p> <p>Floating zone approval in areas with PD, PN, or MX zoning.</p> <p><u>STAGE 3:</u> Ten-Year Water and Sewer Plan amendment or Westside SMA depending on mechanisms employed above.</p> <p>Floating zone approval as needed.</p>

OPTION 3: EAST SIDE PRIORITYSUMMARY OBSERVATIONS

This option stages development in response to a number of the fiscal, community building and environmental limitations of the area while still allowing for ample residential development over the next decade. About 2/3 of the proposed residential units for Clarksburg would be allowed to proceed with development in Stage 2.

A major drawback of this option, however, is that it allows significantly more development to proceed in Stage 2 (approximately 11,400 units) than the available capacity provided by the I-270/MD 121 Interchange (3,000 units). Thus, this option will likely raise unrealistic expectations among the development community concerning the actual amount of development that will be allowed to proceed.

Finally, this option allows far more development to proceed initially than is desirable in an area as environmentally sensitive as Clarksburg, and does not adequately reinforce community design and identity in the Town Center area.

STRENGTHS:FISCAL ISSUES:

- * Provides for a sufficient critical mass of development to make development districts or other public/private financing mechanisms feasible.

COORDINATION OF LAND DEVELOPMENT AND INFRASTRUCTURE:

- * Efficiently coordinates West Side development with the availability of key transportation infrastructure improvements (I-270/Newcut Road Interchange in particular).

COMMUNITY BUILDING:

- * Provides for sufficient development to meet community building goals (i.e., enough residential units to support retail development and to create school-based neighborhood units).
- * Provides an adequate mix of housing types to satisfy MCPS objectives of a balanced socio-economic mix within school service areas.

MARKET RESPONSIVENESS:

- * Allows for significant residential development so that Montgomery County can achieve its forecasted share of regional housing construction.
- * Provides enough development competition to offer a range of choice in housing prices and living styles.

WATER QUALITY PROTECTION:

- * Concentrates development on the eastside, which is less environmentally sensitive than the Ten Mile Creek watershed.

WEAKNESSES:FISCAL ISSUES:

- * May result in competition with the rest of Montgomery County for scarce public monies (if development districts do not fully cover necessary costs of other infrastructure such as schools, recreational facilities, etc.).

COORDINATION OF LAND DEVELOPMENT AND INFRASTRUCTURE:

- * May create unrealistic expectations that development can proceed, only to be stopped at the time of subdivision when there is an insufficient staging ceiling capacity under the AGP (due to capacity limitations of I-270/MD 121 Interchange).

COMMUNITY IDENTITY:

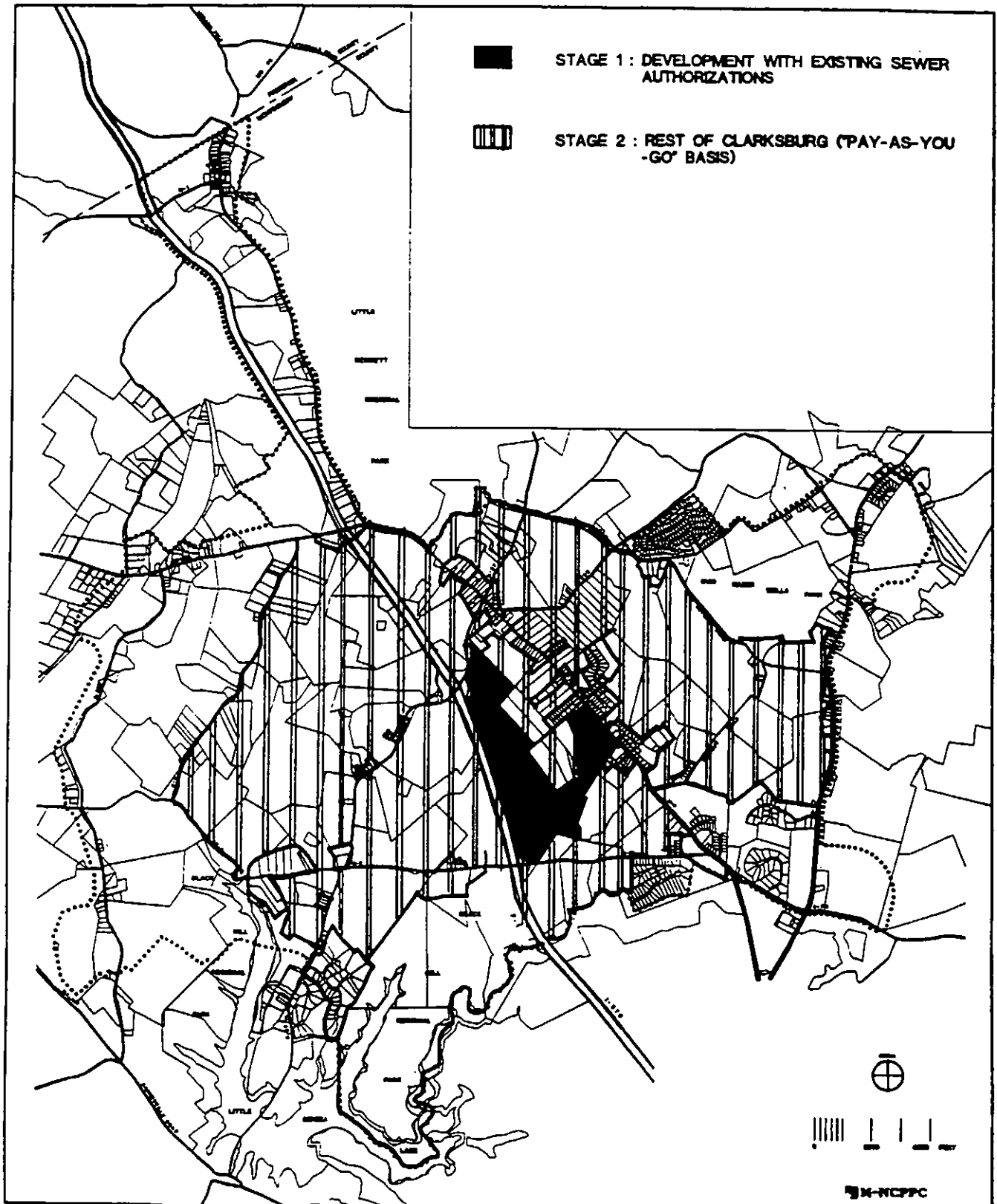
- * Fails to provide the Town Center with a head start on development, which may detract from Master Plan goals to create a strong community identity and sense of design in this area.

WATER QUALITY PROTECTION:

- * Is inconsistent with water quality review process goals to fine-tune BMP designs and performance through the initial monitoring of a limited, sub-watershed area that is less sensitive.
- * Higher density development of the Town Center may negatively impact the water quality in the environmentally sensitive headwaters of the Little Seneca Creek drainage basin.

STAGING OPTION #4
Pay As You Go

Staging Option 4: Pay-As-You-Go Development



STAGING OPTION #4: PAY-AS-YOU-GO DEVELOPMENT
OVERVIEW OF KEY CHARACTERISTICS

RATIONALE	DESCRIPTION	STAGING TRIGGER*	IMPLEMENTATION MECHANISMS
<p>No need for staging beyond initial wastewater treatment and transmission constraints.</p> <p>Development districts or other non-traditional financing mechanisms will be able to pay for a significant portion of Clarksburg infrastructure costs.</p> <p>No economies of scale can be achieved by geographic staging of development.</p>	<p><u>STAGE 1:</u> Development limited to those properties with existing sewer authorizations.</p> <hr/> <p><u>STAGE 2:</u> Development allowed to proceed throughout Clarksburg subject to the availability of funding for necessary public infrastructure improvements.</p>	<p><u>STAGE 1:</u> Plan adoption.</p> <hr/> <p><u>STAGE 2:</u> A solution for wastewater treatment problem is 100% programmed in first 4 years of CIP</p> <p align="center">AND</p> <p>Clarksburg Facilities Plan is completed</p> <p align="center">AND</p> <p>One or more development districts or similar non-traditional financing mechanisms are implemented.</p>	<p><u>STAGE 1:</u> Simultaneous area-wide SMA and Ten-Year Water and Sewer Plan amendment,</p> <p align="center">OR</p> <p>Downzoning to interim zoning categories.</p> <hr/> <p><u>STAGE 2:</u> Ten-Year Water and Sewer Plan amendment or SMA (depending on mechanism employed above).</p>

OPTION 4: PAY-AS-YOU-GO DEVELOPMENT

SUMMARY OBSERVATIONS

While responding to market demand for unlimited residential opportunities in Clarksburg, this option fails to address many infrastructure, community building, and water quality protection issues that are also important to the community.

The limited carrying capacity of the I-270/MD 121 interchange also suggests that development will be limited to approximately 3,000 dwelling units until the I-270/Newcut Road interchange can be programmed in the State's Comprehensive Transportation Plan (this project is an estimated 10 to 15 years off). Thus, this option would create unrealistic expectations within the development community concerning the amount of development allowable in the near future.

Finally, considerable differences of opinion exist between OPI and Planning Board staff concerning the fiscal value of this option. OPI staff believe that this staging option allows the development community to take maximum advantage of opportunities to form development districts or to undertake similar non-traditional financing mechanisms. Planning Board staff is concerned that the failure to seek economies of scale of infrastructure development through geographic staging will eventually lead to the County assuming a much larger fiscal burden than is currently envisioned in or by pending development district legislation.

STRENGTHS:

FISCAL ISSUES:

- * Provides more certainty to developers interested in forming development districts (i.e., development districts will not be "held back" by the concern that forthcoming environmental or planning regulations might limit future development).

COMMUNITY IDENTITY:

- * Allows sufficient development to support a range of retail opportunities and community facilities in Clarksburg.

MARKET RESPONSIVENESS:

- * Politically, the easiest way to ensure fair treatment to all developers (no preference given to any particular property owner or geographic area--if funding for needed infrastructure is available, development may proceed).
- * Responds to market demand for single-family housing in Montgomery County.

WEAKNESSES:**FISCAL ISSUES:**

- * May be difficult to accurately determine the costs of needed infrastructure over the long term, which could result in government paying a greater share of infrastructure costs than expected.
- * May result in competition with the rest of Montgomery County for scarce public monies (if development districts do not fully cover necessary infrastructure costs)

COORDINATION OF LAND DEVELOPMENT AND INFRASTRUCTURE:

- * May create unrealistic expectations that development can proceed, only to be stopped at the time of subdivision when there is an insufficient staging ceiling capacity under the AGP (transportation capacity is constrained in early years by the limited capacity of the I-270/MD 121 interchange).
- * May result in the inefficient use of costly infrastructure resources (particularly linear facilities such as sewer and water lines).

COMMUNITY IDENTITY:

- * Fails to reinforce the Town Center concept and may conceivably hinder its realization (due to excessive competition).

MARKET RESPONSIVENESS:

- * The rate and location of development may be influenced by how vocal certain property owners are and by who applies and develops first rather than any predetermined policy preference or long-term planning goals.

WATER QUALITY PROTECTION:

- * Higher density development of the Ten Mile Creek watershed and the Town Center may negatively impact the water quality of environmentally sensitive stream valleys.
- * Fails to take advantage of the opportunities for improved water quality protection (new knowledge, techniques, and technologies) that could be gained through water quality monitoring in limited areas in communities such as Clarksburg.
- * Severely limits the implementation of new measures that would provide added protection for environmentally sensitive areas of Clarksburg.

- * Is inconsistent with water quality review process goals to fine-tune BMP designs and performance through the initial monitoring of a limited, sub-watershed area that is less sensitive.

ATTACHMENTS

B. STAGING PRINCIPLES**1. Land-Use Planning Related**

- a. To create a strong sense of community identity and provide a model for later development elsewhere in the area, include portions of the Town Center in early phases of development.
- b. Assure that areas planned for higher density development near transit are not preempted by less intensive uses.
- c. Help assure that essential public facilities, particularly schools and water/sewer infrastructure, are planned in sequence with development.

2. Fiscal Related

- a. Ensure that the timing and sequence of private development is responsive to the County's ability to fund associated capital improvement projects.
- b. Endorse the creation of mechanisms which would offer the possibility for private developers to join in public-private ventures to fund essential community facilities.
- c. Recommend that the zoning process be considered as one of the vehicles for implementing staging principles related to fiscal feasibility.
- d. Include funding of school construction (not just the dedication of school sites) and other public facilities as elements of public-private ventures. (This Plan assumes that operating costs will come from Montgomery County Public Schools general operating budget or other revenue sources.)
- e. When proposals for optional zones are submitted, identify the fiscal impact of development in relation to the County's short-term and long-term Capital Improvements Program (CIP).

3. Market Related

- a. Establish a staging program which provides incentives for the private sector to work with the County to address infrastructure needs.
- b. Accommodate in Clarksburg a reasonable share of the County's future annual residential growth rate. One figure presented for discussion by some members

of the Ad Hoc Work Group was 10 - 15% of the County forecasted annual residential growth.

- c. Establish a staging sequence that gives private property owners reasonable certainty about when their properties might be in an appropriate stage for development.
- d. Provide a staging program that offers a variety of housing products in every stage to promote an active, healthy market.

C. APPLICATION OF STAGING PRINCIPLES TO PLANNING DISTRICTS

Staff has prepared a map (see Circle 14) which applies the staging principles to the various analysis areas identified in the Preliminary Draft Plan. This was presented to the Ad Hoc Staging Work Group and immediately raised questions about how the concept would be implemented and what it meant for the timing of development in the various districts.

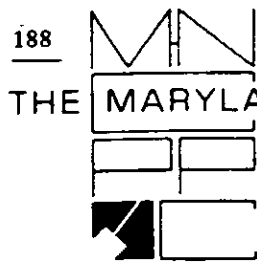
Staff is not endorsing this staging approach at this time but is presenting it for discussion purposes. The events needed to "open" each of the planning districts needs further refinement and staff will continue to work on these events prior to the February 25 worksession on Implementation.

As background to the lively discussion that is expected on this subject, staff would like to highlight the key features of the staging approach reflected on pages 14 and 15:

1. The Town Center and the MD 355 Corridor are clearly identified as the top priority for near-term development.

Although generally, there was agreement that this is a valid staging principle, owners of land elsewhere are very concerned that this means nothing else can go forward until completion of some arbitrary number of units in the Town Center/MD 355 Corridor. This is an issue that bears discussion and raises the need for the Plan to specifically identify events which would allow other areas to go forward.

2. The Cabin Branch Neighborhood located west of I-270 is identified in later stages of development.
3. Although the staging recommendations identify the Town Center as top priority and the Cabin Branch Neighborhood as later priority, the map intentionally avoids a sequential format for staging (e.g., Stage I, Stage II, etc.) of the districts and relies instead on staging objectives and events for each area.



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

April 15, 1994

MEMORANDUM

TO: Laura Briggs, Community Planning Division

VIA: Jorge A. Valladares, P.E., Chief
Environmental Planning Division *JAV.*

FROM: Laura Bachle *LB*
Environmental Planning Division

SUBJECT: Status and Future Use of Sewer Capacity in Germantown and
Clarksburg Policy Areas

Status of Sewer Service

WSSC has declared the Seneca and Muddy Branch basins Potential Overflow Basins as defined in the Comprehensive Water Supply and Sewerage Systems Plan. The plan defines a Potential Overflow Basin as "part or all of any basin which has not experienced regular overflows of user backups, but for which the calculated or observed peak sewage flow, allowing for an appropriate wet weather reserve, exceeds the peak sewer operating capacity." Unless additional capacity is provided, the conditions will escalate to an Existing Overflow Basin. If this occurs, WSSC will no longer issue sewer permits or authorize any future permits. Currently, WSSC has observed exceedences of the safe sewer operating capacity. As part of the Ten-Year Water and Sewer Plan, all category changes in these areas now have a condition which notifies the developer that plumbing permits may not be honored due to the overflow problem.

Sewer service in the Seneca Creek basin, which serves Clarksburg and Germantown, is currently deficient for two reasons: transmission capacity in the lines serving the area and treatment capacity at the Seneca Wastewater Treatment Plant.

The first deficiency is addressed by seventeen projects in the current CIP. The County Council has deferred final approval of these projects until a review of the Systems Development Charge (SDC) issues in the operating budget. Approval is recommended for all the projects, however, except for the Little Seneca Relief Sewer Parts 2 and 3 (S-84.29 & S-84.30) which run along the shore of Little Seneca Lake. A new PDF that explores pumpover options has been requested. Currently, the lack of infrastructure is affecting development activity in the northern portion of

Germantown. Milestone is immediately affected.

The second deficiency concerns treatment capacity. Once the sewer transmission problems can be addressed, then there has to be a way of treating the increased effluent. This will require a decision about how to supply additional treatment capacity. A number of alternatives have been spelled out in the Strategic Sewerage Plan. The Seneca Creek Upgrade (S-53.06) will make the current WWTP permanent and provide some upgrade in treatment capacity and some relief for the Muddy Branch sewer. This upgrade in capacity will be on line by July, 1997, however, it will not provide even a temporary solution to capacity problems. It will only reduce the amount of time the plant spends in operating over safe capacity limits.

The permanent solution to treatment capacity problems must await continued evaluation of alternatives by the agencies involved in water and sewer planning. A decision by the Montgomery County Council is also needed. It is optimistically speculated that a solution to the treatment problems may be underway in six years.

Future Use of Sewer Capacity

Staff of the Environmental Planning and Research Divisions completed a quick analysis of forecasts, existing pipeline, and plumbing permit information for Germantown and Clarksburg. Current (Round 5) forecasting shows Clarksburg and Germantown "competing" for sewer capacity at the turn of the century. Commercial capacity in Germantown is high. Approximately 85% of authorized commercial development is in the pipeline. This compares to about 45% authorized residential development. (Authorized development refers to approved subdivisions and site plans that have "queued up" at WSSC. The percentages indicate the amount of development that has been authorized but does not have plumbing permits). It is likely that additional commercial development in Germantown will occur prior to any increase in demand for housing in Clarksburg.

It cannot be accurately predicted where development would take place if both areas were available for water and sewer service at the same time, however both areas are handicapped by the sewer treatment deficiency. Relief will arrive at the same time to both areas (post year 2000). In the interim, slower growth in Germantown could result from sewer transmission and capacity problems as easily as it could from market conditions.

In any case, treatment capacity deficiencies should be taken into account for staging in Clarksburg. Based on these deficiencies, it is prudent to confine the first stage of Clarksburg development to existing authorizations only, given the current status of sewer service. It is also reasonable to assert that, due to sewer deficiencies, Germantown and Clarksburg development will both be dependent on facilities that will not be available for at least six years, and that this dependency will affect the rate of growth in the planning areas.

Discussion of Pancar Property:

The Pancar property is a 53-acre tract located northwest of the intersection of West Old Baltimore Road and MD 355 in the Brink Road Transition Area. The property was recommended for R-200 zoning in the 1968 Plan and is recommended for R-200/TDR zoning in this Master Plan. There is a completed Preliminary Plan of subdivision that has been pending at the Planning Board, awaiting a sewer category change.

Previous requests for a category change were denied pending preparation of the Master Plan. Because the proposed Preliminary Plan will implement the intent of this Master Plan and in light of the fact that this property has been in the development approval process for some time, it is appropriate to extend service to this property in the near term.

Fiscal Impact Analysis Summary

The Clarksburg Master Plan and Hyattstown Special Study Area Fiscal Impact Analysis (July 1993) prepared by Montgomery County Government, Office of Planning Implementation (OPI) is available at the OPI office in Rockville. A reference copy is also available for public review at M-NCPPC Information Counter in Silver Spring. Due to the length of the final report, only the Executive Summary is included in this section.

Executive Summary

Purpose of the Study

This analysis of the Clarksburg Master Plan examines the fiscal impact of the development likely to occur over the next 20 years. The Regional District Act mandates that the Executive prepare a fiscal analysis of proposed master plans.

This study anticipates that 10,150 new houses and almost 2 million square feet of retail, office, and industrial space will be built in Clarksburg between 1995 and 2015. This analysis estimates that the capital program needed to serve this new growth will cost about \$250 million. New growth in Clarksburg will raise approximately \$124 million in property taxes and income taxes over a 40-year period that could be used toward the County's debt service payments.

If the County wants to implement the Plan as proposed, the County must identify approximately \$126 million in additional revenues. If additional revenues cannot be raised, the County may need to consider a smaller capital program for the same level of development or a plan to delay development until more revenues are found.

Potential Sources of Revenue

This analysis estimated potential revenue from several types of supplemental revenues.

- The County could reallocate existing revenues to pay for new projects in Clarksburg. Approximately \$19 million is theoretically available for debt service payments from existing businesses and residents in Clarksburg. If the County were to fund the entire \$126 million, it would increase the debt per capita by about \$133 by the year 2015. This equivalent to 10.4 percent of the current per capita debt of \$1,270.
- The County could use nontraditional revenue sources to raise more money. Currently, the County collects impact taxes to help pay for roads in Germantown and the eastern part of the County. The County has also adopted a Construction Excise Tax (CET) to help fund new capital projects. This tax is scheduled to go into effect in 1995.
- CET revenues from new growth in Clarksburg would raise almost \$37 million that could be used to offset the \$126 million funding gap.
- If the County chose to impose a CET to cover the entire \$126 million gap, current fees would increase substantially. The rates would increase as follows:

multi-family units	\$900 to \$3,079
townhomes	\$2,100 to \$7,138
single-family detached homes	\$4,800 to \$16,439
R&D/office	\$2.40 to \$8.21/square foot
general office and retail use	\$4.00 to \$13.68 square foot

- An impact tax based on road and school usage would shift the burden among the various uses. It would lower the rates for single-family detached housing; slightly increase the multi-family rate, the general office rate, and the R&D rates; and substantially increase the retail rate.

Potential Capital Program Modifications

The \$250 million capital program estimate includes several costs that would not be absolutely critical to the initial implementation of the Clarksburg Plan. If the County is unable to identify new revenue sources but still wished to implement the Plan, an alternative course of action would be to reduce capital program costs.

- A \$250 million capital program estimate includes almost \$40 million in maintenance and replacement costs. Revenues to offset these costs could be deferred to a later date.
- The capital program estimate also includes about \$15 million in transportation improvements that could be eliminated if the County chose to modify the formula that it uses to estimate future levels of traffic congestion.
- Altogether, these modifications could reduce the capital costs from \$250 million to \$195 million. Nonetheless, in general, the County's ability to address future funding problems solely through capital program modification is limited. Assuming \$161 million from "adopted" revenue sources (i.e., \$124 million from property and income taxes and \$37 million from the CET), there would be a shortfall of about \$34 million. Thus, even with a scaled back capital program the County would need to virtually double current CET rates to implement the Plan.

Limits of the Analysis

Previously, OPI estimated total costs to implement the Plan would be in excess of \$450 million from all sources. While this analysis raises important questions about the development of a funding strategy, implementation of the Master Plan will extend far beyond the County Capital Improvements, which are the focus of this analysis.

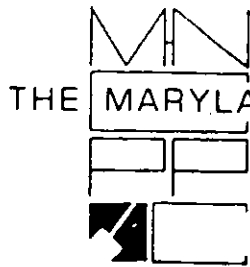
Water and sewer services and the transitway are particularly critical to Plan implementation. OPI estimated water and sewer projects at \$72 million; however, this estimate covered local lines only. It did not include service for Hyattstown or improvements needed to address wastewater treatment.

The Long-Range Strategic Plan released by the Washington Suburban Sanitary Commission (WSSC) last spring identifies an expansion to the Seneca Wastewater Treatment Plant as the first in a series of critical decisions the County must make to address sewer issues. Clearly, a solution to wastewater treatment should precede implementation of a financing mechanism, which presumes development will be able to move forward.

Several estimates in the Plan assume that today's practices and guidelines will continue far into the future. Examples of these assumptions include the following:

- The analysis estimates total future General Fund expenditures by assuming that property and income taxes will continue to make up 72 percent of these revenues. To the extent the share of these traditional sources changes, these estimates would need to be revised.
- The analysis assumes that no more than 10 percent of General Fund expenditures will be available for debt service payments. This limit is used because it is one of the major debt limit guidelines the County follows today to maintain its AAA bond rating.
- Finally, this analysis assumes that almost all of the residential development but only half of the nonresidential development called for in the Plan will develop in the next 20 years. Moreover, the Plan estimates that total residential development will approach only 75 to 80 percent of the end-state zoning yield. These estimates are very preliminary. Changes to the development yields and/or timing could affect the level and costs of Capital Improvements that will be needed.

Resolutions of Approval and Adoption



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

MCPB NO. 94-8
M-NCPPC NO. 94-10

RESOLUTION

WHEREAS, The Maryland-National Capital Park and Planning Commission, by virtue of Article 28 of the Annotated Code of Maryland, is authorized and empowered, from time to time, to make and adopt, amend, extend and add to a General Plan for Physical Development of the Maryland-Washington Regional District; and

WHEREAS, the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, pursuant to said law, held a duly advertised public hearing on March 23, 1992, and April 2, 1992, on the Public Hearing (Preliminary) Draft Clarksburg Master Plan, being also an amendment to the Clarksburg and Vicinity Master Plan, 1968, as amended; a portion of the Master Plan for Historic Preservation, 1979, as amended; a portion of the Functional Master Plan for Preservation of Agriculture and Rural Open Space, 1980; a portion of the Germantown Master Plan, 1989; a portion of the Boyds Master Plan, 1985; the Master Plan of Bikeways, 1978, as amended; being also an amendment to the General Plan for the Physical Development of the Maryland-Washington Regional District, as amended; and the Master Plan of Highways within Montgomery County, as amended; and

WHEREAS, the Montgomery County Planning Board, after said public hearings and due deliberation and consideration, on June 3, 1993, approved the Planning Board (Final) Draft of the proposed Plan, and recommended that it be approved by the District Council and forwarded it to the County Executive for recommendations and analysis; and

WHEREAS, the Montgomery County Executive reviewed and made recommendation on the Planning Board (Final) Draft Clarksburg Master Plan and forwarded those recommendations with a fiscal analysis to the District Council on July 30, 1993; and

WHEREAS, the Montgomery County Council, sitting as the District Council for the portion of the Maryland-Washington Regional District lying within Montgomery County, held public hearings on September 9 and 21, 1993, wherein testimony was received concerning the Planning Board (Final) Draft Clarksburg Master Plan; and

WHEREAS, the District Council, on May 23, 1994, approved the Planning Board (Final) Draft Clarksburg Master Plan subject to the modifications and revisions set forth in Resolution No. 12-1632; and

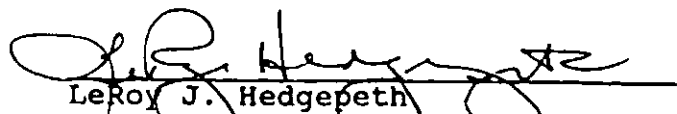
NOW, THEREFORE, BE IT RESOLVED, that the Montgomery County Planning Board and The Maryland-National Capital Park and Planning Commission do hereby adopt said Clarksburg Master Plan, together with the General Plan, for the Physical Development of the Maryland-Washington Regional District as amended; and Master Plan of Highways within Montgomery County as amended; and as approved by the District Council in the attached Resolution No. 12-1632; and

BE IT FURTHER RESOLVED, that copies of said Amendment should be certified by The Maryland-National Capital Park and Planning Commission and filed with the Clerk of the Circuit Court of each of Montgomery and Prince George's Counties, as required by law.

This is to certify that the foregoing is a true and correct copy of a resolution adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission on motion of Commissioner Richardson, seconded by Commissioner Floreen, with Commissioners Hussmann, Floreen, Aron, Baptiste and Richardson voting in favor of the motion at its regular meeting held on Thursday, June 9, 1994, in Silver Spring, Maryland.


Leroy J. Hedgepeth
Executive Director

This is to certify that the foregoing is a true and correct copy of a resolution adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission on motion of Commissioner Floreen, seconded by Commissioner McNeil, with Commissioners Hussmann, Rhoads, Baptiste, Boone, Dabney, Floreen and McNeil voting in favor of the motion, with Commissioners Aron and Richardson being absent, at its regular meeting held on Thursday, June 15, 1994, in Mitchellville, Maryland.


Leroy J. Hedgepeth
Executive Director

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION
OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT
WITHIN MONTGOMERY COUNTY, MARYLAND

By: District Council

Subject: Approval of Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area

Background

1. On June 30, 1993, the Montgomery County Planning Board transmitted to the County Executive and the County Council the Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area.
2. The Planning Board (Final) Draft Master Plan amends the Clarksburg and Vicinity Master Plan, 1968, as amended; a portion of the Master Plan for Historic Preservation, 1979, as amended; a portion of the Functional Master Plan for Preservation of Agriculture and Rural Open Space, 1980; a portion of the Germantown Master Plan, 1989; the Master Plan of Bikeways, 1978, as amended; being also an amendment to the General Plan for the Physical Development of the Maryland-Washington Regional District, as amended; and the Master Plan of Highways within Montgomery County, as amended.
3. On July 30, 1993, the County Executive transmitted to the District Council comments concerning the Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area with a fiscal analysis.
4. On September 9 and 21, 1993, the County Council held public hearings regarding the Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area. The Master Plan was referred to the Planning, Housing and Economic Development Committee for review and recommendation.
5. On October 4 and 18, 1993 and November 8 and 29, 1993 and December 6 and 13, 1993, January 31, 1994, February 1, 7, 14, 22, and 28, 1994, and March 11, 14, and 25, 1994, and April 21, 22, and 26, the Planning, Housing and Economic Development Committee held worksessions to review the issues raised in connection with the Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area. Several revisions to the Master Plan were recommended by the Committee.
6. On April 5, 11, 12, 14, 15, 19, and 26, 1994, the County Council reviewed the Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area and the recommendations of the Planning, Housing and Economic Development Committee.

7. On January 18, 1994 and March 22, 1994 the County Council extended the deadline for action on the Planning Board (Final) Draft Clarksburg Master Plan for 60 days.

Action

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following resolution:

The Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area, dated June 1993, is approved with revisions. Council revisions to the Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area are identified below. Deletions to the text of the Plan are indicated by [brackets], additions by underscoring.

CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA

Page vi, paragraph 1, sentence 2:

[The Advisory Committee does not take a position or vote as a body.] It is the Planning Board's policy that Advisory Committees not vote on issues.

INTRODUCTION

Page 1, 1st paragraph:

This Plan is the culmination of a five[three]-year process that has featured over 30 meetings of the Clarksburg Master Plan Citizens Advisory Committee, 13 Planning Board worksessions, 18 County Council Planning Housing and Economic Development Committee meetings, 7 County Council worksessions, community workshops on a variety of planning topics, property owners workshops, technical workgroup meetings on staging and implementation, and close coordination with governmental agencies affected by the Plan's recommendations.

Page 2, last paragraph:

Creating a vision for Clarksburg that embraces these policy objectives has resulted in significant changes to the 1968 Plan. The most significant changes involve the clustering of development east of I-270. The 1968 Plan anticipated extensive residential development, with public water and sewer service throughout the Study Area. [This Plan makes environmental protection a key objective west of I-270.]

Page 6, policy 2 under third paragraph:

2. This Plan recommends that Clarksburg's natural features, particularly stream valleys, be protected and recommends that [designates the] Ten Mile Creek [Area as an area of special environmental concern.] and Little Seneca Creek be afforded special protection as development proceeds.

Page 6, policy 8 under third paragraph:

8. This Plan emphasizes the importance [balances the role] of I-270 as a high-technology corridor for Montgomery County [with the town scale of development proposed for Clarksburg.] and the region and preserves key sites adjacent to I-270 for future employment options.

Page 6, policy 10 under third paragraph:

10. This Plan recommends [that zoning implementation policies in Clarksburg should be responsive to fiscal concerns.] development be staged to address fiscal concerns and to be responsive to community building and environmental objectives.

Page 7, revise Figure 4 to reflect County Council changes.

Page 8, paragraph 6, 1st sentence:

The 1993 General Plan Refinement of the Goals and Objectives for Montgomery County [will] amends the 1964 General Plan, commonly called ". . . on Wedges and Corridors" and the 1969 Updated General Plan for Montgomery County (approved in 1970).

Page 10, first paragraph:

This Master Plan seeks to retain the existing employment centers in Clarksburg and adds employment acreage along selected locations near I-270. [The Plan does not seek a vast expansion of employment opportunities in the area, allowing the major portion of economic activity to be directed to the Urban Ring and more developed portions of the Corridor (Economic Activity Objective 6).] This recommendation conforms to the General Plan Refinement's Statement that the I-270 Corridor "is a significant employment resource for the County and region." Improving connections between commercial centers and residential areas are promoted in the Plan, as envisioned by the General Plan Refinement (Economic Activity Strategy 4C). The recommendations which permit the intensification of existing centers of economic activity are in accord with Vision 6 of the State Planning Act -- economic growth is encouraged.

Page 12, paragraph 2:

The General Plan Refinement recognize[d]g that there will be conflicts among its goals, objectives, and strategies and noted that "it is only within the master plan context, where decisions about individual parcels of land are made, that any reasonable prioritization of competing goals and objectives can be made."

Page 12, paragraph 3, delete last sentence:

Clarksburg is located on the I-270 Corridor, which the General Plan Refinement identifies as a major development area. The Refinement's intent is contained in the land use objective, "Direct the major portion of Montgomery County's future growth to the Urban Ring and the I-270 Corridor." However, environmental resources in Clarksburg also require protection. Both the General Plan Refinement throughout the Environment Goal and the 1992 Planning Act urge protection of sensitive areas. Addressing these two factors has been a challenge throughout the planning process. The balance struck by the Clarksburg Plan is to propose a transit-oriented town scale of development largely east of I-270. [More than one-third of the Study Area is designated for rural and agricultural land uses.]

Page 12, paragraph 6:

The County Council Public Hearing on the Planning Board (Final) Draft Plan provided [will offer] the general public an opportunity to express their concerns to the Council. After the Public Hearing, a series of Council worksessions were [will be] held and appropriate revisions to the Plan were [will be] made. [It is anticipated that the Plan will be adopted by the County Council by early 1994.]

Page 13, revise Figure 6 to reflect County Council action.

VISION FOR THE FUTURE

Page 16, paragraph 2:

The Concept Plan for Clarksburg, as shown in Figure 7, envisions a transit-oriented community located in a natural setting. About [80] (to be recalculated) percent of all future development is channeled to the Town Center and a series of transit-oriented neighborhoods. Approximately [two-thirds] 40% of the Study Area is designated as agricultural and rural open space.

Page 16, after paragraph 3:

1968	1989	[Planning Board]
Clarksburg	Germantown	[Draft] 1994 Clarksburg
Master Plan	Master Plan	Master Plan
Population 41,900	92,000	[44,000] <u>43,000</u>

Page 16, add new bullet to bottom of page:

- Continues the role of I-270 as a high technology center but proposes a scale and intensity of employment uses that is consistent with a town scale of development.

Page 17, revise Figure 7 to reflect County Council changes

Page 18, paragraph 1:

POLICY 2: NATURAL ENVIRONMENT

This Plan recommends that Clarksburg's natural features, particularly stream valleys, be protected and [designates the] recommends Ten Mile Creek [Area as an area of special environmental concern.] and Little Seneca Creek be afforded special protection as development proceeds.

Page 18, paragraph 4:

[Clustering 80 percent of proposed development in one-third of the land area is the most significant response to protecting Clarksburg's environmental features. Within the developed portion of the Study Area, this Plan proposes environmentally related guidelines for roads, stormwater management, and noise as a means to protect features.] Efforts beyond the current environmental guidelines are considered crucial to address development impacts on the high-quality environment of Clarksburg. This Plan protects the most sensitive environmental resources by applying additional water quality review and monitoring requirements.

Page 18, after bullet 5:

- o Recommends development in the most sensitive watershed (Ten Mile Creek) occur only after the implementation and evaluation of the water quality review process has been completed.

Page 24, after bullet 5:

- o Designates certain historic and scenic roads as "rustic" to help preserve their character.

Page 25, revise Figure 11 to reflect County Council changes

Page 26, after bullet 7:

- o Designates an area visible from I-270 for high-technology employment uses.

Page 27, revise Figure 12 to reflect County Council changes

Page 30, paragraph 1:

POLICY 8: EMPLOYMENT

This Plan [balances the role] emphasizes the importance of I-270 as a high-technology corridor for Montgomery County [with the town scale of development proposed for Clarksburg.] and the region and preserves key sites adjacent to I-270 for future employment options.

Page 30, paragraph 2:

The proximity of Clarksburg to I-270 has resulted in the location of two significant employment campuses in the area: Comsat and Gateway 270. These two areas, both zoned for office and light industrial uses, could ultimately generate more than 20,000 jobs. [The amount of land presently zoned or planned in the County for office uses will address projected employment needs for at least 40 years. For this reason, this Plan proposes additional office/R&D related employment uses in Clarksburg be limited to the portion of the I-270 Corridor at the southern end of the Study Area where Comsat and Gateway 270 are located.] Although these two campuses are likely to meet employment needs for year to come, this Plan recognizes the long term importance of I-270 as a high-technology corridor. For this reason, the Plan designates acreage on both sides of I-270 for employment sites. In addition to being visible from I-270, these sites lie near existing or proposed interchanges and are large enough to allow comprehensively designed employment centers.

Page 30, before bullet 1:

- o Continues the role of I-270 as a high technology center but proposes a scale and intensity of employment use that is consistent with a town scale of development.

Page 31, revise Figure 14 to reflect County Council changes:

Page 32, bullet 1:

- o Proposes that [2,100] 1,900 acres in Clarksburg be added to the County's Agricultural Reserve Area. This recommendation will help create a transition from the I-270 Corridor to productive agricultural land in western Montgomery County. The preservation of farmland will also contribute to the concept of Clarksburg as a town surrounded by rural open space.

Page 32, bullet 2:

- o Proposes that certain areas in the vicinity of Clarksburg be removed from the Agricultural Reserve. Approximately [380] 425 acres are involved. The agricultural character of these areas, also shown in Figure 15, will be changed once the land use and transportation recommendations of this Plan are implemented.

Page 33, revise Figure 15 to reflect County Council changes.

Page 34, revise as follows:

POLICY 10: STAGING

This Plan recommends that [zoning implementation policies in Clarksburg should be responsive to fiscal concerns.] development be staged to address fiscal concerns and to be responsive to community building and environmental protection objectives.

The end-state Land Use Plan will require a substantial amount of capital facilities. The Montgomery County Office of Planning Implementation has pointed to the need for additional revenue sources to fund these facilities.

Other Planning concerns which underscore the need for opening development areas in accord with established staging principles, include:

- A. Sewage treatment and conveyance system capacity constraints
- B. Plan objectives to foster early development of the Town Center and the east side of I-270 in general
- C. Environmental concerns in Ten Mile Creek

This Plan:

- o Identifies six staging principles to help guide growth in Clarksburg.
- o Designates four geographic staging areas (see Figure 16) and staging events which must occur prior to development of each stage.
- o Relies on the Comprehensive Water and Sewer Plan to implement the staging recommendations.
- [o Proposes that rezoning of properties in Clarksburg to higher density occur only when new revenue mechanisms are in place or imminent and public funds are available for the public share of capital facility costs.]
- [o Includes two zoning implementation options which address different fiscal scenarios.]
- o Outlines how the Annual Growth Policy (AGP) and the Comprehensive Water Supply and Sewerage Systems Plan can be supportive of zoning strategies.

[The properties affected by this recommendation are shown in Figure 16.]

Page 35, revise Figure 16 to reflect County Council changes.

LAND USE PLAN

Page 37, paragraph 1, third sentence:

The area west of Ten Mile Creek [Area] is proposed for rural and agricultural uses.

Page 38, Figure 17 to be revise to reflect County Council changes.

Page 39, Table 2, revise as follows:

Table 2

RECOMMENDED HOUSING MIX BY GEOGRAPHIC AREA

	Multi-Family	Attached	Detached
Town Center District	25-45%	30-50%	10-20%
Transit Corridor District			
Transitway Area	30-50%	40-60%	5-10%
MD 355 Area	5-10%	30-40%	50-60%
Newcut Road Neighborhood	10-20%	35-45%	45-55%
Cabin Branch Neighborhood	10-20%	35-45%*	45-55%
<u>Ten Mile Creek East</u>	<u>0%</u>	<u>0-30%</u>	<u>70-100%</u>
Total Study Area	15-25%	30-40%	40-50%

Note: * Includes 5-10% Semi-Detached Units.

Page 40, Table 1, revise as follows:

Table 1

**SUMMARY OF MAXIMUM END-STATE DEVELOPMENT
POTENTIAL BY GEOGRAPHIC AREA***

Planning Subarea	Acres	Dwelling Units*	Employment and Retail (Square Feet)
Town Center District	635[590]	2,600[3,390]	770,000[227,000]
Transit Corridor District	990	2,790	3,300,000-5,000,000** [5,600,000]
[Transitway Area	460	1,430	5,444,000]
[MD 355 Area	530	1,360	156,000]
Newcut Road Neighborhood	1,060	4,660	109,000
Cabin Branch Neighborhood	950	1,950[2,280]	2,420,000[1,311,000]
Ridge Road Transition Area	900	540[490]	26,000
Brink Road Transition Area	860	1,000	871,000
Hyattstown Special Study Area	687[570]	150[280]	155,000
Ten Mile Creek Area	3,588[3,750]	1,240[480]	960,000[160,000]
Totals	9,670*** [9,700]	14,930*** [15,400]	8,611,000-10,311,000*** [8,500,000]

* See the Technical Appendix for a description of the methodology used to calculate end-state development. End-state development is based on zoned holding capacity yields.

** [Seneca Correctional Facility.] The maximum amount of development on the Comsat property could range from 2.3 million square feet to 4.0 million square feet depending on whether Master Plan criteria relating to transit-oriented development are met.

*** Rounded.

Note: All numbers in the text will be changed in accordance with this table.

Page 41, Figure 18, revise to reflect County Council changes.

Page 42, add bullet after bullet 1:

- o Reinforce the concept of I-270 as a high tech employment corridor by designating a suitable site near I-270 for employment use.

The land use plan recommends an employment site for up to 470,000 square feet in the Town Center District. The proposed site has the following characteristics:

- o it is visible from I-270;
- o it adjoins a future proposed transit stop; and
- o it has excellent access from the I-270/MD 121 interchange.

In accord with the Plan intent to foster a mix of uses and to promote an interrelated land use pattern, a zoning option which encourages the joint development of residential and employment uses is proposed. This approach is also intended to promote a more integrated overall Town Center concept and a better relationship between this property and portions of Town Center east of MD 355.

This zoning option (the MXP Zone—see Zoning chapter) would apply to all the acreage shown in Figure _____.

Page 42, 1st paragraph after bullet 2:

In terms of residential uses, the Plan assumes an ultimate build-out of approximately [3,400] 2,600 units in the Town Center. The recommended guidelines in terms of mix of units are as follows:

Multi-Family	25 to 45%
Attached	30 to 50%
Detached	10 to 20%

The total number of units in Town Center may be increased in the PD and RMX zones up to 20% if carriage homes are accessory to a primary dwelling unit or they are a primary dwelling on a lot; however, the final determination regarding this increased number of units, their design and placement (so as not to result in an adverse concentration and impact) will be made by the Planning Board at the time of Project Plan or Development Plan approval. These units will not count as Moderately-Priced Dwelling Units. The Planning Staff should continue to explore whether a text amendment allowing separate ownership of a carriage house or changes to Chapter 25A are necessary.

Page 42, add at end of page:

The Town Center District boundary bisects some properties; portions of the properties within Town Center are recommended for densities of 2-4 units per acre.

If density is clustered from the portions of the properties outside the Town Center, then a density of 5-7 units per acre for the portions inside Town Center would be appropriate. Approval of this density would be dependent upon a proposed development achieving compatibility with the scale and intensity of neighboring uses and meeting Plan objectives regarding compatibility with the historic district.

Page 43, revise Figure 19 to reflect County Council changes.

Page 44, paragraph 1, 1st sentence:

In terms of [office and retail uses] commercial uses, up to [190,000 to 225,000] 300,000 square feet are proposed.

Page 44, bullet 2:

- A maximum square footage of the retail center is proposed (up to approximately [120,000] 150,000 square feet).

Page 48, add new paragraph after "• The open space element in the triangle formed ...":

The location, design and size of community services and community facilities should reflect the more concentrated development pattern proposed for the Town Center. Facilities should be planned in this context and be land intensive and pedestrian oriented; the same plan principles which guide private development should also guide public uses.

Page 48, bullet 1, paragraph 1, 3rd sentence:

This Plan recommends that a high degree of public interaction be provided in the Town Center, in close proximity to the retail center, to encourage a post office, library, [senior citizens' center,] and community center. At the time of development, Planning Staff will identify the amenity required under the RMX zone. A civic use may be an appropriate amenity for this area.

Page 48, bullet 2, paragraph 2:

A transit stop is proposed in the Town Center west of the historic district on Redgrave Place and A-19. Clarksburg Elementary School is located here. Although t[T]his Plan endorses the long-term future replacement of this school at another location, the continued operation of the school is anticipated for many years to come.

Page 49, revise Figure 21 to reflect County Council changes.

Page 52, add as last sentence to second paragraph, under first bullet:

The width of the greenway should be the minimum width needed to provide a trail system, but should not be any wider than necessary in Town Center.

Page 53, revise Figure 22 to reflect County Council changes.

Page 54, insert the following at the location of bullet 3 and move bullet 3 to precede the last paragraph on the page:

o Continue the present employment uses along I-270.

Page 54, paragraph 4:

The Plan assumes a maximum build-out potential of [5.6]5 million square feet of ~~employment~~ in this district. The large amount of employment square footage reflects the [maximum] buildout of two office parks already partially built and occupied: Gateway 270 and Comsat. This Plan assumes continued buildout of these properties as major employment centers. This Plan caps development on the Comsat site at 2.3 million square feet of employment with the option of increasing development to 4.0 million square feet if the development pattern is transit-oriented. The Plan does recommend a relatively small portion of the Comsat property be changed from employment to residential uses. This portion of the Comsat site is separated from the main campus by a stream valley. [The number of employees which could be generated by 5.6 million square feet ranges from 15,000 to 22,000.] For this reason, the transitway is located as close as possible to these employment areas. This Plan designates a transit stop location on the Comsat property.

As discussed in the Transportation chapter, a park-and-ride lot is a future possibility in the vicinity of the Comsat transit stop. This Plan recommends a park-and-ride lot on the Comsat property only if developed in cooperation with Comsat.

Page 54, last paragraph:

To introduce housing into this significant employment area, the Plan designates land adjoining the transit stops as residential. This approach will result in approximately [1,500] 1,000 dwelling units in close proximity to employment. Two areas along the proposed Observation Drive/transitway are designated as residential centers. The Shawnee Lane transit area includes several different parcels, including properties proposed for redevelopment. A density of 7-11 dwelling units per acre is proposed here and a Planned Development (PD) Zone is recommended to encourage assemblage and to promote a mix of uses near the transit stop itself.

Further north, a 41-acre parcel is recommended for residential uses at 7-9 dwelling units per acre. Although traversed by Observation Drive/transitway, this property is not proposed as a transit stop nor is a mix of residential and non-residential uses proposed. For these reasons, higher density residential uses are recommended to be achieved through the transfer of development rights to help implement County agricultural preservation policies.

Page 63, add new bullet after bullet 4:

- o The property has extensive frontage along I-270, opposite Comsat and Gateway 270, making it an important part of the I-270, high tech corridor.

Page 63, paragraph 4:

This Plan concludes that the opportunity to provide a transit-oriented [serviceable] residential neighborhood and to re-inforce the I-270 high-tech corridor concept are [is] the most important public policy objectives. This Plan proposes that the environmental concerns be addressed by mitigation strategies, discussed in the Environmental Plan chapter, at time of development. This Plan also proposes buffers along the streams.

Page 63, text below the last bullet:

Residential	-	[2,280] <u>1,950</u> dwelling units
Employment	-	[900,000-1,200,000] <u>2,000,000 - 2,300,000</u> square feet
Retail	-	[110,000] <u>120,000</u> square feet.

Page 64, revise Figure 26 to reflect County Council changes.

Page 65, revise Figure 27 to reflect County Council changes.

Page 66, after 1st paragraph:

Detached	45 - 55%
Attached	35 - 45% (<u>includes 5-10% semi-detached</u>)
Multi-family	10-20%

Page 66, and a new bullet before the first bullet:

- o Encourage an employment pattern which is supportive of I-270 as a high-technology Corridor.

Approximately 175 acres of this neighborhood fronts I-270. This acreage offers an opportunity for a large, comprehensively planned employment center in close proximity to a residential neighborhood and associated retail and support services. This Plan recommends a mixed-use planned development zoning strategy (MXPD Zone--see Zoning Plan chapter) for the employment frontage to foster an integrated plan which could include residential units.

The MXPB Zone would allow more intensive office uses on the northern portion of this site than would be allowed under the RMX base zone. Although the southern portion of the area fronting I-270 is recommended for I-3 zoning, this area would also be appropriate for MXPB to allow the entire 175 acres to be planned and designed in a comprehensive fashion.

A major Plan concern is that the employment uses become an integral part of the overall Cabin Branch Neighborhood and that strong interrelationships be established among residential, employment, retail, and public facility uses. To encourage this, proposals for development should include a discussion of how individual plans will relate to the Master Plan's overall vision for the Cabin Branch Neighborhood.

Page 67, bullet 2 and the paragraph below it:

- o Provide a suitable transition to the rural/open space character [west of MD 121] south of West Old Baltimore Road toward Boyds.

[This neighborhood adjoins the Ten Mile Creek Area which is proposed as agricultural and rural-open space. MD 121 separates the two areas. This Plan recommends that development in the Cabin Branch Neighborhood be set back from MD 121 or, alternatively, that single-family detached homes front MD 121 to establish a character compatible with low-density development west of MD 121. This Plan also recommends that, to the maximum extent possible, attached and multi-family uses be clustered away from the intersection of MD 121 and West Old Baltimore Road towards the neighborhood center, school, and park.]

South of West Old Baltimore Road, the key planning objective along MD 121 is to maintain the present rural character so a strong transition is provided between the Cabin Branch and Ten Mile Creek East neighborhood and the rural community of Boyds. For this reason, a low density residential land use pattern (1 dwelling unit per 1 acre) is recommended.

Just south of West Old Baltimore Road lies a 165-acre farm (the Reid Farm). To further the plan objectives regarding open space preservation along MD 121, this Plan recommends density be clustered away from MD 121. As with the Cabin Branch Neighborhood north of West Old Baltimore Roads, the use of TDR's is recommended to achieve higher density. The following Master Plan guidelines will be reviewed at time of subdivision.

- o The number of dwelling units should not exceed 225.
- o The mix of housing types should include a minimum of 85 percent detached.

- o The view from Rt. 121 should remain open and unobstructed. Housing should be clustered away from Rt. 121 and located in the area shown on the land use plan so that it does not obstruct the vista from Rt. 121.
- o The open space pattern surrounding the residential cluster should be contiguous and not subdivided into residential lots. This would not preclude use as a farm and related farming activities.
- o A portion of the open space should be dedicated as a special park once both subdivision has occurred and farming operations have ceased on the open space.

Page 68, delete last bullet: .

- [o Include employment uses as part of the mixed-use neighborhood concept.

This Plan recommends employment use on approximately 70 to 90 acres located west of I-270 and south of MD 121. This area is located close to a future I-270 interchange and will be significantly inspected by future noise levels from I-270. This employment area is located at the edge of the Cabin Branch Neighborhood and near areas proposed for low-density residential south of West Old Baltimore Road. The location, massing and landscaping of buildings in the employment area should provide an appropriate transition to less dense uses south of West Old Baltimore Road.]

Page 69, sentences 1 & 2 of paragraph under last bullet:

East of Ridge Road, [a 91-acre farm forms] two properties totalling about 150 acres which are now being farmed form a transition between half-acre, suburban residential development to the north in Damascus and highly productive farmland to the south in the Goshen-Woodfield area. Although the [91-acre farm is] properties are part of the Clarksburg Master Plan and [is] are currently zoned for half-acre residential, the Damascus Master Plan includes the recommendation that this area be re-examined in relation to agricultural preservation goals as part of the Clarksburg Master Plan process.

Page 70, paragraph 2:

This Plan recommends [land south of the proposed greenway be included in the Agricultural Reserve] a rural land use pattern to reinforce the agricultural character envisioned for the Goshen/Woodfield Area. The Rural Cluster Zone encourages farming but also allows some residential development at 1 dwelling per 5 acres. The portion of the farm fronting Ridge Road is recommended for 1 unit per acre to allow the type of development pattern already present in the area--single-family detached homes oriented to Ridge Road.

Page 71, revise Figure 28 to reflect County Council changes.

Page 73, bullet 2, paragraph 2:

[Since the proposed transitway traverses this property, the Plan includes an option for a higher density mixed-use zone. In the near term, however, low density uses are most appropriate to reflect the capacity of West Old Baltimore Road.]

Page 74, last bullet:

- o Designate M-83 as an appropriate edge to the Agricultural Reserve area east of Ridge Road.

East of Ridge Road, the proposed M-83 alignment forms the edge of a 130-acre area presently zoned for agriculture. This Plan recommends ~~a change in land use for that parcel because M-83, once built, will separate the acreage from the larger Agricultural Reserve area. The Plan proposes a change to [low density residential] rural land use that allows low-density residential uses as well as farming.~~ However, as noted in the Implementation Strategies chapter, rezoning from the present agricultural zone to the Rural Zone should not occur until the location and design of M-83 is under way.

[Residential development at 2 dwelling units per acre (TDR-2) would be appropriate here in accord with the following development guidelines:

1. Sewer and water service infrastructure should be provided at no public cost.
2. Development must be responsive to the Plan's designation of this area as environmentally sensitive.]

Page 75, revise Figure 29 to reflect County Council changes.

Page 77, sub-bullet 2, add after second paragraph:

Two properties in this area are partially zoned for commercial use. One of these properties is a cemetery and the adjacent property to the north is undeveloped. This Plan recommends removal of commercial designation for the cemetery property. The Plan recommends the commercial designation for the entire 1.7-acre adjacent property located at the Frederick County line. This property is located in the Hyattstown Historic District and future development will be reviewed by the Historic Preservation Commission under the provisions of the County's Preservation Ordinance. Any new commercial development on this property must be of a character, size, and scale that is consistent with the historic area in Montgomery County.

Page 77, third sub-bullet:

- o Support for the provision of [public]community sewer and water service in the Hyattstown Historic District.

The provision of [public]community sewer service to Hyattstown is essential if the town is to survive. This Plan strongly endorses the provision of service in a timely manner.

Page 78, revise Figure 30 to reflect County Council changes.

Page 79, revise Figure 31 to reflect County Council changes.

Page 80, bullet 1, last paragraph:

The density recommended for the transition area is one unit per [five] two acres[, to reinforce the rural character of the area]. The intent of this density is to maintain a rural character while allowing property owners some flexibility in locating smaller lots (2 acres) on better soils. It is anticipated that poor soils for septic systems will preclude an overall density of 1 dwelling unit per 2 acres. This Plan does not support extension of public water and sewer unless the County fails to sewer Hyattstown.

Page 80, last bullet, paragraphs 1 and 2:

As previously noted, the provision of community [water and] sewer service is essential to the future of Hyattstown. The County Department of Environmental Protection [is conducting] has conducted [studies] a study to determine how to provide this service. Serving Hyattstown alone[, where there are only 50-60 homes, may be extremely costly and may affect whether Hyattstown can be served from a fiscal perspective.] is dependent on cooperation between WSSC and the County. The FY 1995-2000 CIP has identified a project to resolve the Hyattstown sewerage needs. Should this project not be implemented due to fiscal or institutional constraints, t[T]his Plan includes a higher density option for the transition area to help provide a greater service area, thereby offering an incentive for greater developer participation in the provision of sewer.

This higher density option (PD-2 two units per acre) would only be suitable if County efforts to program a solution in the County's adopted CIP to sewer Hyattstown in a timely manner (within [five] two years of adoption of the Master Plan) prove unsuccessful and it can be shown that it is feasible to develop the sewerage system necessary for the higher density option.

Page 82, paragraph two under bullet 1:

Just north of the area zoned I-1, the Plan supports [a] the existing mix of [special exception uses] rural scale services and residences. The businesses located here are [already] non-conforming uses and have been for many years. Rezoning this area to industrial or commercial would change the character from rural residential to strip commercial and industrial. At the same time, properties are affected by noise from I-270—a situation which will worsen as traffic volumes along I-270 increase. Landscaped screening would improve the vistas of those entering Montgomery County along I-270. The configuration of properties (parcels are "sandwiched" between I-270 and MD 355) will make it impossible for residential development to be clustered outside projected severe noise contours. [The special exception review process will allow consideration of the scale and character of non-residential uses and help assure the existing character is maintained.] The area recommended for this policy is shown in Figure 33: This Plan recommends creation of a new zone to permit services of a scale and character which would be compatible in rural settings and would encourage appropriate landscaping and access. Such a zone would be appropriate in this portion of the Plan. If the new zone for this area is not approved, this Plan recommends that this area be zoned Rural with special exceptions used to maintain as many of the currently existing uses as possible.

Page 82, add a new bullet after the 1st bullet:

- o Recommend property west of I-270 and north of Comus Road be added to the Agriculture Reserve area.

This area includes 161 acres which were zoned light industrial (I-3) in 1964. This Plan examined the option of continuing an industrial use designation on this site in light of the following site characteristics:

- o Lack of access to I-270. Although this parcel is highly visible from I-270, there is no direct access to I-270.
- o Lack of planned sewer and water service. This Plan is recommending rural and agricultural uses in the vicinity of this parcel—no public sewer or water service is envisioned given the planned low density character of the area.
- o Lack of planned road and bridge improvements in area. This property is located on Comus Road, a planned 2-lane road, and traffic from the site would cross I-270 on a bridge which has limited carrying capacity.

All of these factors make this property unsuitable for the type of high-technology office employment envisioned along the I-270 Corridor. The site better relates to the agricultural areas to the north and west.

Page 83, revise Figure 33 to reflect County Council changes.

Page 84, first subtitle:

TEN MILE CREEK AREA ([3,750] 3,588 Acres)

Page 85, revise Figure 34 to reflect County Council changes.

Page 86, the 1st bullet and its text up to the following page:

- o Recommend a land use pattern east of Ten Mile Creek which [supports the continuation of the Ten Mile Creek Area as a significant environmental asset.] balances environmental concerns, County housing needs and the importance of I-270 as a high-tech employment corridor.

[In terms of the area east of Ten Mile Creek, this Plan recommends a rural residential land use pattern (one lot per five acres).] Because this area is separated from the larger agricultural reserve by Ten Mile Creek, agricultural preservation is not the primary objective. The key land use objective in this area is to [retain densities low enough to protect Ten Mile Creek and to provide an] provide housing and job opportunities while mitigating water quality impacts in Ten Mile Creek. An open space pattern extensive enough to help protect the many natural attributes of the larger watershed is recommended by this Plan.

A more detailed discussion of the environmental characteristics and concerns in this area is included in the Environmental Plan chapter. During the Master Plan process, the importance of protecting these environmental resources was weighed against competing County needs, in particular, the long term County-wide need for additional areas for single-family detached housing, and the future of I-270 as a significant employment corridor. [If developed at densities of 2 to 3 dwelling units per acre, the area east of Ten Mile Creek could allow the development of over 1,000 units.]

This Plan recommends an extensive level of environmental mitigation because [preservation as the primary land use objective for the following reasons:

- o A]all the environmental studies done as part of this Master Plan process have identified Ten Mile Creek as a fragile stream due to its delicate ecosystem, low base flow, and highly erodible stream banks. In this respect, Ten Mile Creek differs from other streams in the Study Area and merits special consideration.
- [o The headwaters of Ten Mile Creek are located east of I-270 in the Town Center District. The Master Plan objective to create a Town Center near the historic district and along the proposed transitway has resulted in development being proposed near the headwaters. Thus, a portion of the Ten Mile Creek will be affected by development east of I-270.]

[West of I-270, the County owns a large parcel, a portion of which is now planned for a detention center. This use will also drain to Ten Mile Creek. The cumulative effect of these two future development areas on Ten Mile Creek, if coupled with additional residential development east of the creek, is of serious concern. The Ten Mile Creek is already under stress. Every additional acre of imperviousness will affect the Creek's capacity to assimilate. Although without better monitoring data and modeling, it is difficult to predict at what point physical, chemical and biological thresholds for Ten Mile Creek would be reached. This Plan concludes that additional residential development east of Ten Mile Creek would certainly degrade existing water quality and may affect state standards for Class IV streams.]

[For these reasons, the Plan recommends low density residential uses east of Ten Mile Creek.]

Page 88, add two new bullets before the 1st bullet:

- o Recommend employment sites along I-270 and include development criteria to help address environmental concerns.

Two employment sites are recommended in this area; both front I-270 and both are in close proximity and have good access to the I-270/MD 121 interchange.

The character of development at these sites is very important given their location in the Ten Mile Creek Sub-basin (see Environmental Plan chapter). The following guidelines are intended to foster environmentally sensitive site plans when these sites develop:

- o Each site shall have no more than 400,000 square feet of floor area.
- o An imperviousness limit of 15% shall apply to the entirety of each site (this coverage shall be calculated over the entire property—not just the portion which is zoned for industrial, see figure (to be prepared)).
- o Development plans should include tightly clustered buildings close to I-270 to promote transit serviceability.
- o Both sites will require improved access from MD 121 once development occurs and I-270 improvements require relocation of Whelan Lane (the current access). The Master Plan recommends relocated Whelan Lane to be kept as close to the existing alignment as possible to minimize new stream crossings.
- o Recommend residential land uses west of MD 121 and include development guidelines to help address environmental concerns and to assure a predominance of single-family detached units.

This Plan recommends that approximately 600 acres be designated RE-1/TDR with a base density of one unit per acre--the density recommended by the 1968 Clarksburg Master Plan but never implemented.

Up to 900 dwelling units would be appropriate through the purchase of TDRs if the following environmental and housing mix guidelines can be achieved.

- o Development should achieve a minimum of 70% single-family detached units. The Office of Planning Implementation has documented the need for single-family detached lots to meet projected future market demand. Master Plan guidelines will help assure this type of development occurs in this area.
- o The open space and conservation areas along Ten Mile Creek's mainstem and tributaries shown on the Master Plan should remain undeveloped and should be afforested.
- o Dedication to M-NCPPC will be required for the open space and conservation areas along Ten Mile Creek's mainstem. At the time of subdivision, M-NCPPC will decide whether the open space along the tributaries will also be required for dedication to parkland or will become homeowner's association common land.
- o There may be a need for future study of possible water reservoir sites and Ten Mile Creek is identified as a potential study site. Therefore, this development should be able to accommodate a possible future reservoir within the open space shown on the Master Plan.

Page 88, 1st bullet and its text up to the following page:

- o **Provide general guidance in terms of future potential uses of County-owned land (Site 30).**

Montgomery County owns a 300-acre site known as Site 30 (see Figure 36). [A portion of the site will be the location of the Seneca Correctional Facility (SCF), a detention center for minimum to medium security inmates. Since the SCF will only occupy a portion of the property, other public uses could be accommodated on the site.]

This Plan recommends the following land use pattern for this site:

- o The portion of the property fronting I-270 is recommended for office or R&D uses, not to exceed 400,000 square feet of floor area.
- o A publicly owned facility could be accommodated elsewhere on the property. A detention center for minimum to medium security inmates (the Seneca Correctional Facility) is presently planned for Site 30. If the detention center is located elsewhere, then an alternative public use of similar scale and intensity may be appropriate.

This Plan recommends that the ultimate [Land Use Plan for] development of Site 30 include the following elements:

- o The greenway proposed along Ten Mile Creek.
- o Preservation of the Moneysworth Farm historic site on the property (adaptive re-use of the building is encouraged).
- o A compatible transition to surrounding rural and open space uses.
- o No access to Shiloh Church because a significant stream crossing would be required.
- o Designation of a significant portion of Site 30 as open space.
- o Impervious surfaces shall not exceed 15% for the entirety of Site 30 (including public and private uses).

[In addition, this Plan recommends that any public water and sewer facilities constructed to serve this site have a service envelope limited to the public uses on the site. This approach would be supportive of Master Plan recommendations to retain a rural and open space character on adjoining parcels and would help minimize the amount of stream valley affected by construction of sewer lines. This recommendation for the area adjacent to I-270 that could be served by gravity sewer to the Site 30 pump station may have to be reconsidered if Town Center development (a portion of which also drains to Ten Mile Creek even though it is located east of I-270) requires access to these sewer lines to achieve Master Plan staging and land use objectives.]

Because of the many environmental constraints on Site 30, its location in a sensitive watershed, and the rural/agricultural character of surrounding land uses, evaluating whether a particular public facility is suitable at Site 30 must occur as part of a well defined planning process. Such a process should include citizen participation and involve other governmental review agencies as early in the process as possible. [This Plan endorses a process which includes:

- o Appointment of a citizen advisory group as well as a technical advisory group to evaluate proposed public uses.
- o Preparation of a draft plan for review and comment by the community and presentation of the plan at a public meeting.
- o Early review of the draft plan by the Montgomery County Planning Board for consistency with the goals and objectives of the Clarksburg Master Plan.
- o A County Executive Public Hearing on the draft plan.]

ZONING PLAN

Page 93, replace Figure 38 with attached revised Zoning Plan.

Page 94, add as last sentence to 3rd paragraph under "1. Implementing Mixed-Use Neighborhoods":

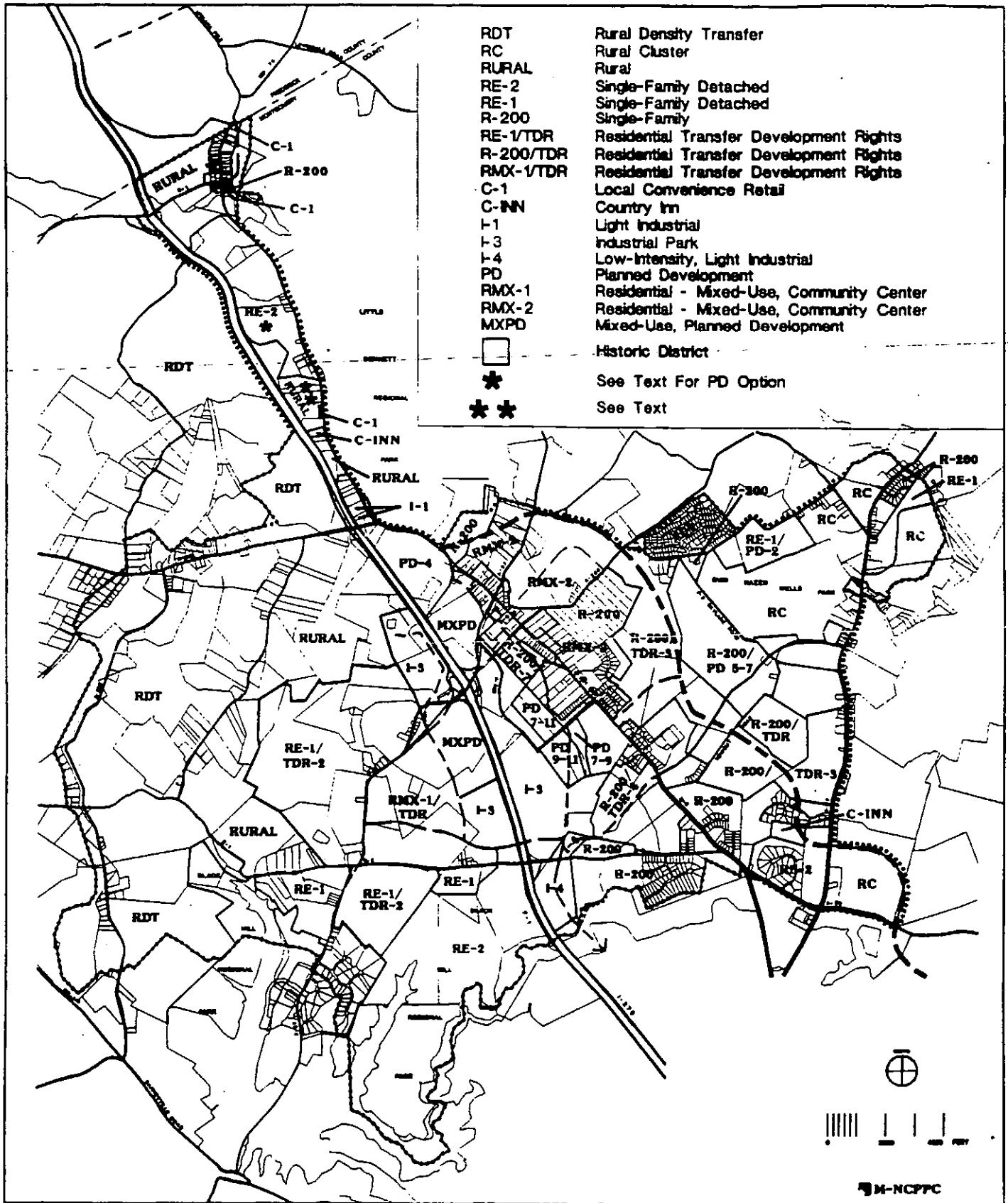
Where there is a range in the PD density, the higher density may be achieved only through maximum use of the MPDU provisions.

Page 94, insert as last paragraph under "1. Implementing Mixed-Use Neighborhoods":

The boundary of the Town Center to the north and east is A-305. The actual alignment of A-305 may change as a result of design and engineering studies. The area appropriate for RMX-2 should be bounded by A-305's final alignment.

ZONING PLAN

Resolution No. 12-1632



CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA

Page 95, revise Table 3 as follows:

Table 3

SUMMARY OF TDR ZONE RECOMMENDATIONS

Area	Acres	Recommended Zone	Maximum Potential Development Rights
Cabin Branch Neighborhood	[430] <u>355</u> <u>165</u>	RMX-1/TDR <u>RE-1/TDR-2*</u>	[1,000] <u>734</u> <u>31</u>
Newcut Road	670	R-200/TDR-3	670
MD 355 Corridor	175	R-200/TDR-4	350
[Brink Road Transition Area]	[130]	[RE-2/TDR-2]	[195]
[Total]	[1,405]		[2,215]
<u>Transit Corridor</u>	<u>41</u>	<u>R-200/TDR-7</u>	<u>205</u>
<u>Ten Mile Creek East</u>	<u>593</u>	<u>RE-1/TDR-2*</u>	<u>194</u>
<u>Total</u>	<u>1,999</u>		<u>2,184</u>

* The owners/representatives of these properties have requested the TDR designation. The Master Plan establishes density caps of less than the full density allowed by the zone on these properties.

Page 95, insert at bottom of page:

3. Implementing the Vision of I-270 as a high-technology employment corridor.

This Plan includes many employment sites along I-270. Some are presently zoned I-3 but this Plan recommends a substantial reduction in the actual acreage proposed for I-3. The key reasons for reducing the amount of I-3 zoned land include:

- o The Plan's intent to keep employment uses clustered toward I-270 rather than allowing buildings to spread over large expanses of land.
- o Concern that continuing the existing zoning pattern could allow upwards of (to be recalculated) thousand employees in an area envisioned as a town rather than a major employment center.

The most significant area of new employment is located in the Cabin Branch Neighborhood where up to 2.3 million square feet of office-type uses could occur. This Plan recommends this development occur as part of a mixed-use concept to allow the opportunity for housing. RMX zoning will be the base zoning for the northern portion of this site and I-3 for the southern portion with an MXPD option over the entire area to allow for comprehensive planning of these mixed uses.

The same zoning approach is recommended along I-270 in the Town Center to encourage joint development of employment and residential uses near a future proposed transit stop.

The Land Use Plan designates sites suitable for I-3; the actual zoning configuration will be refined at time of SMA.

Page 96, revise Table 4 as follows:

Table 4
SUMMARY OF ZONING CLASSIFICATIONS¹

<u>Zone</u>	<u>Description</u>	<u>Maximum Density (Units Per Acre)/Building Height²</u>
[RESIDENTIAL] AGRICULTURAL ZONES³		
RDT	Rural Density Transfer	1 Unit/25 Acres
RC	Rural Cluster	1 Unit/5 Acres
Rural	Rural	1 Unit/5 Acres

RESIDENTIAL ZONES

RE-2	Single-Family Detached	0.4/Acre
RE-1	Single-Family Detached	1.0/Acre
R-200	Single-Family	2.0/Acre
R-150	Single-Family	2.9/Acre
R-90	Single-Family	3.6/Acre
R-60	Single-Family	5.0/Acre
R-30	Multi-Family	14.5/Acre

TRANSFERABLE DEVELOPMENT RIGHTS (TDR)

RMX-1/TDR	The TDR density shown on the
R-200/TDR	Zoning Plan can only be
[RE-2]RE-1/TDR	achieved through the transfer of
	development rights from the
	Agricultural Reserve

COMMERCIAL ZONES

C-1	Local Convenience Retail	30 Feet
C-2	General Commercial	3 Stories/42 Feet
C-Inn*	Country Inn	2-1/2 Stories

EMPLOYMENT ZONES

I-1	Light Industrial	10 Stories/120 Feet
I-3*	Industrial Park	100 Feet/0.5 FAR
I-4	Low-Intensity, Light Industrial	42 Feet

PLANNED DEVELOPMENT AND MIXED-USE ZONES

PD*	Planned Development	Variable
PN*	Planned Neighborhood	Variable
MXPD*	Mixed-Use Planned Development	Variable
RMX-1*	Residential - Mixed-Use	Variable
	Development, Community Center	
RMX-2*	Same as above	Variable

Note: * These zones generally involve more rigorous review procedures by the Planning Board and/or County Council.

Page 98, revise Table 5 to reflect County Council changes.

TRANSPORTATION AND MOBILITY PLAN

Page 101, paragraph 2, sentence 2:

Most parts of the transportation system serve both of these functions. Generally, freeways (I-270), major highways [(M-83 and MD 27),] and the transitway are intended to serve the movement of longer distance through traffic while local neighborhood streets and neighborhood bus loops, bikeways, and walkways tend to only provide access to the residential and business areas through which they pass.

Page 102, bullet 8:

- o Identify a strategy in the Clarksburg Town Center and Hyattstown Historic District to route regional through traffic away from these sensitive areas and onto [major highways] I-270, arterial roadways and the transitway.

Page 103, bullet 6:

- [o Identify criteria for potential sites for heliports, which should be evaluated as part of a region-wide heliport study.]

Page 103, last paragraph:

This Plan recommends the location of t[The transitway [could be contained] within the entire length of the A-19 (Observation Drive) right-of-way from Germantown to MD 355 (B-1), north of the Clarksburg Historic District. [Alternates that would separate the transitway from the A-19 roadway alignment between West Old Baltimore Road and Foreman Boulevard are included for purposes of the Public Hearing.] From the intersection of A-19 and MD 355 the transitway joins MD 355, crosses [M-83,] A-305 and continues along MD 355 to its intersection with Comus Road. North of Comus Road, the transitway's recommended location is within the I-270 right-of-way. [Due to the presence of Wildcat Branch in the median, more than 500 feet of right-of-way may be required to accommodate transit and highway improvements.] The mode of transit (light rail or bus, for example) will be determined by more detailed preliminary design and feasibility studies to be conducted by the Montgomery County Department of Transportation (MCDOT).

If the Maryland Department of Transportation (MDOT) or MCDOT develops a revised alignment for the transitway or A-19 through Clarksburg, this Plan recommends that the Planning Board and County Council consider such an alignment. Any such revision which is approved by a vote of the County Council may proceed without need for another Master Plan amendment, but only after the Council and the Planning Board provide an opportunity for comprehensive public input including, but not limited to, a public hearing by the Council.

Page 104, Table 6, under Auto/Highway column, bullet 1:

- o Emphasize I-270 [and M-83] for regional through trips

Page 105, paragraph 1, 1st sentence:

...way's recommended location is within the I-270 right-of-way. [Due to the presence of Wildcat Branch in the median, more than 500 feet of right-of-way may be required to accommodate transit and highway improvements.]

Page 105, paragraph 2:

The recommended alignment[s are] is subject to further feasibility and engineering studies to determine [their] its exact location[s], cross-section[s] and mode[s] of operation. All options for use of [these] this alignment[s] should be considered in the course of the MCDOT design study, including grade separated and at-grade locations. [All] The alignments should be considered for integration with surrounding land use where appropriate. These studies should also determine a feasible funding schedule for construction of [these] the transitway[s] and the expected sources of funding.

Page 105, bullet 1, last sentence:

Initially, service to the Boyds MARC station is recommended, to be followed by longer distance bus connections along I-270 and [M-83] A-305.

Page 105, last paragraph:

Park-and-Ride lots will perform an important function early in the development of Clarksburg in terms of establishing transit patterns. Park-and-Ride lots should be located [as interim uses] near future transit stops. This strategy will help establish centers of transit service which will ultimately evolve into transit stations. This Plan recommends the reservation of land to allow for a total of no more than 800 park-and-ride spaces to be distributed among the three future transit stops located within the Study Area. As noted in the Land Use Plan chapter, a park-and-ride lot should be located on Comsat only if coordinated with the property owner.

Page 106, paragraph 1:

The Plan concept for streets and highways is shown in Figure 11. I-270 and [M-83] A-305 will provide north-south access and are intended to accommodate large volumes of traffic. These two roads will be linked by a series of east-west roadways ([Foreman Boulevard] Stringtown Road, Newcut Road Extended, and Clarksburg Road).

Page 106, paragraph 4, 1st sentence:

The Study Area roadway network is recommended to consist of freeway, major highway, arterial roadway, business district, and primary residential street classifications.

Page 106, last paragraph:

[The Plan recommends that I-270 be widened to no more than 10 travel lanes through the Study Area. This would include 6 general use main line travel lanes coupled with a 2-lane collector- distributor (C-D) road paralleling the mainline on each side within a 500-foot right-of-way. This design would also accommodate the Corridor Cities Transit Easement (CCTE) Study within the I-270 right-of-way from north of Comus Road to the Montgomery County/Frederick County line, and thus] This Plan recommends that I-270 be widened to no more than 8 travel lanes, within a 350-foot right-of-way, between MD 121 and the southern Study Area boundary. Between MD 121 and the Frederick County line this Plan recommends that I-270 be widened to no more than 6 travel lanes, within the existing variable right-of-way plus 50 feet (plus an additional 50 feet north of Comus Road to allow for the transitway). These right-of-way recommendations would not preclude the design of C-D roads within the envelope of individual interchanges recommended by this Plan. This design will provide for a balanced transportation facility which offers both automobile and transit as viable travel options. Additional transit or HOV facilities on I-270 may be considered south of Comus Road. [The proposed 500-foot right-of-way could allow for the construction of up to 12 lanes on I-270, including 8 mainline general use travel lanes, in conjunction with the C-D roads and transitway described above. However, t]The Plan recognizes that the addition of travel lane I-270 capacity beyond [10]the recommended number of travel lanes may seriously undercut transit demand between Frederick County and Montgomery County. Further, such a design may not meet auto emissions attainment standards mandated by the Clean Air Act of 1990 and thus may not qualify for federal project funding.

Page 107, revise Figure 39 to reflect County Council changes.

Page 108, Table 7, revise as on the following pages:

Master Plan Roadway Designation			Number of Travel Lanes ¹	
Designation	Name	Limits	Maximum Recommended	Minimum Right-of-way Width ¹¹²
Freeway				
F-1	Washington National Pike (I-270)	Southern Study Area Boundary to MD 121	8 lanes [plus Collector-Distributor roads]	[500'] <u>350'</u>
		MD 121 to [County Line] <u>Comus Road</u>	6 lanes [plus Collector-Distributor roads]	[500'] <u>250'</u>
		<u>Comus Road to County Line</u>	6 lanes	<u>Existing plus 100'</u>
Major Highways				
M-6	Frederick Road (MD 355)	Newcut Road [Relocated] <u>Extended</u> to Southern Study Area Boundary	4 <u>Divided</u>	120'
M-27	Ridge Road (MD 27)	Skylark Road to M-83	4 <u>Divided</u>	120'
		M-83 to Brink Road	6 <u>Divided</u>	150'
M-83	Midcounty Highway	Brink Road to [I-270] <u>MD 27</u>	[4-]6 <u>Divided</u>	150'
Arterial Highways				
A-5	Hyattstown Bypass (MD 109)	MD 355 to County Line	2	80'
A-7	West Old Baltimore Road	MD 355 to [A-307] <u>MD 121</u>	2	80'
A-11	Ridge Road (MD 27)	[Kings Valley Road] <u>Northern Study Area boundary</u> to Skylark Road	2	80'
A-19	Observation Drive	Southern Study Area Boundary to MD 355	4 Divided with Transitway	[180'] <u>150'</u> (included 50' for transitway)
A-27	Clarksburg Road (MD 121)	MD 117 (in Boyds) to A-302	2	80'
		<u>A-302 to A-304</u>	4 <u>Divided</u>	<u>120'</u>
		A-304 to I-270 [(I-270 to A-19 to be abandoned when A-260 is constructed)]	[4]6 Divided	[120'] <u>150'</u>

Master Plan Roadway Designation	Name	Limits	Number of Travel Lanes ¹	
			Maximum Recommended	Minimum Right-of-way Width ¹ ₂
		A-[19]260 to Northern Study Area Boundary	2	80'
A-36	Brink Road	MD 355 to M-83	4 <u>Divided</u>	100'
A-251	Frederick Road (MD 355)	Newcut Road [Relocated] <u>Extended to [Suncrest Avenue]A-19</u>	4 <u>Divided</u>	120'
		[Suncrest Avenue to A-19	4	80']
		A-19 to [M-83]A-305	4 <u>Divided</u> with transitway	[180'] 150'
		[M-83]A-305 to Comus Road	2 with transitway	130'
		Comus Road to Hyattstown Bypass	2	80'
A-258	Slidell Road	Northern to Southern Study Area Boundary	2	80'
A-259	Comus Road	MD 355 to Western Study Area Boundary	2	80'
A-260	Stringtown Road	I-270 to [M-83]A-305	4 <u>Divided</u>	120'
A-300	Gateway Center ^[2] Drive	A-[19]260 to A-301	4 <u>Divided</u>	[120']180'
A-301	[Foreman Boul- evard] <u>Shawnee Lane</u>	Gateway Center Drive to [M-83] <u>MD 355</u>	4 <u>Divided</u>	[100']120'
A-302	Newcut Road Extended	MD 121 to [M-83] <u>A-305</u>	4 <u>Divided</u>	120'
		<u>A-305 to MD 27</u>	2	80'
A-304	Proposed Road	Newcut Road Extended (A-302) to [MD 121] <u>Site 30</u>	[2]4 <u>Divided</u>	[100']120'
A-305	<u>Midcounty Highway</u>	<u>MD 27 to Stringtown Road</u>	4 <u>Divided</u>	120'
		<u>Stringtown Road to Clarksburg Road</u>	2	100'
		<u>Clarksburg Road to MD 355</u>	2	80'

Master Plan Roadway Designation	Name	Limits	Number of Travel Lanes ¹	
			Maximum Recommended	Minimum Right-of-way Width ¹
A-306	[Proposed Road] <u>Foreman Boule-</u> <u>vard</u>	[A-304 to MD 121] MD 355 to A-305	2	80'
A-307	Proposed Road	Newcut Road Extended (A-302) to West Old Baltimore Road	2	80'
<u>[Industrial and Business Streets]</u>				
[I-1	Whelan Lane	MD 121 to Site 30 Access	2	80']
B-1	"Old Freder- ick" Road	Through Town Center Area	2	50'
NOTE: SEE TEXT FOR DISCUSSION OF THIS ROAD				
B-2	<u>Redgrave Place</u>	<u>A-19 to Little Seneca</u> <u>Creek</u>	<u>2 with no parking</u> <u>inside historic</u> <u>district</u>	<u>70'</u>
<u>Primary Residential Streets</u>				
[P-1	Newcut Road Extended	M-83 to MD 27	2 Divided	100']
P-2	Skylark Road	Piedmont Road to MD 27	2	70'
P-3	Shiloh Church Road	West Old Baltimore Road to Comus Road	2	70'
P-5	Redgrave Place	[A-251 to Stringtown Road] <u>Little Seneca Creek to</u> <u>A-260</u>	2 [with parking outside historic district]	70'
<u>Rustic Roads</u>				
R-1	Old Hundred Road (MD 109)	MD 355 to I-270	N/A	80'
[R-2	West Old Baltimore Road	New Road (A-307)/ Clarksburg Road (MD 121)	N/A	80']
R-3	Frederick Road (MD 355)	Hyattstown Bypass to County Line	N/A	80'

Master Plan Roadway Designation	Name	Limits	Number of Travel Lanes ¹	
			Maximum Recommended	Minimum Right-of-way Width ^{[1]2}
R-4	Hawkes Road	Ridge Road (MD 27)/ Piedmont Road	N/A	70'
R-5	Piedmont Road ³	Stringtown Road/ Hawkes Road	N/A	70'
R-6	Hyattstown Mill Road	Frederick Road (MD 355)/ Park Boundary	N/A	60'
R-7	Stringtown Road	[M-83] A-305 to Study Area Boundary	N/A	80'
E-1	West Old Bal- timore Road	Clarksburg Road (MD 121)/ Western Study Area Boundary	N/A	80'

¹ These are the number of planned through travel lanes for each segment, not including lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel.

[¹]₂ This minimum may be increased at time of subdivision on the basis of more detailed engineering studies.

[² Existing Gateway Center Drive to be relocated to connect with A-19 when A-19 is constructed. Connection with Clarksburg Road to be abandoned.]

³ Realignment of Piedmont Road is recommended to allow appropriate distance from the [M-83/]A-305/Stringtown Road intersection.

Page 111, paragraph 1, second to last sentence:

This Plan recommends the addition of [two]~~one~~ new interchange[s] in the Study Area and recommends one interchange near Urbana in Frederick County.

Page 111, paragraph 4 and 1st bullet:

Figure 40 shows the new interchange to be designed as a [partial] ~~full~~ movement interchange and located to:

- o Maintain the minimum interchange spacing standard of one mile from the MD 121 interchange.

This Plan intends that this interchange will help improve access to Comsat (see A-19 discussion).

Page 111, paragraph 5:

The design is conceptual and may change [during] as a result of more design studies.

Page 111, last paragraph, second to last sentence:

Construction of this project is anticipated to [begin during 1993] be completed by 1997.

Page 112, Figure 40, Interchange Design Concepts to be revise to reflect County Council changes.

Page 113, delete paragraphs 2 to 5:

[This Plan also endorses the relocation of Whelan Lane directly (I-1) adjacent to the widened right-of-way of I-270 and the MD 121/I-270 interchange. This roadway will provide access to Site 30 from MD 121.

I-270 AT MIDCOUNTY HIGHWAY (M-83)

This Plan recommends an I-270 interchange with M-83 approximately one-quarter mile south of Comus Road to serve the northern portion of the Study Area. This interchange would further de-emphasize the use of MD 355 as a major through route by facilitating access to M-83. In addition, this facility would reduce traffic pressure on the existing interchange at MD 121.

A single loop is shown on the west side (see Figure 40) which provides access between southbound I-270 and the east side of I-270. The eastern half of the interchange utilizes a single ramp to provide access between the east side of the Study Area and northbound I-270. This design and location is designed to:

- o Minimize impacts on wetlands and stream valleys.
- o Maximize the distance between the MD 355/M-83 intersection. It should be noted that, a bridge may be required at MD 355 to separate the two roads if the minimum spacing cannot be provided.
- o Provide for the required traffic movements at this location.

For purposes of Public Hearing, this Plan includes an alternative to M-83 intersecting with I-270. This alternative, included at the end of this chapter, would have M-83 intersect with MD 355 rather than I-270 and would involve changes to the character of M-83 as it traverses Clarksburg. Public Hearing testimony on this issue is welcome.]

Page 114, subtitle:

MIDCOUNTY HIGHWAY M-83/(A-305)

Page 114, paragraph 3 and 4:

This Plan recommends the extension of M-83 as a [four- to] six-lane divided limited access highway from Germantown to MD 27 [I-270, north of MD 121.] It recommends the extension of Midcounty Highway as a four lane divided arterial roadway from Ridge Road (M-27) to Stringtown Road (A-260) within a 120 foot right-of-way. It recommends that the roadway transition to a 2-lane arterial within a 100 foot right-of-way between A-260 and Clarksburg Road, and within an 80 foot right-of-way between Clarksburg Road and its termination at MD 355.

M-83/A-305 is designed to:

Page 114, paragraph 4, 1st sentence:

This Plan recommends that M-83 [this roadway] be constructed within a 150-foot right-of-way with a design which would allow for the construction of the outside lanes with a wide median for future widening.

Page 114, paragraph 5:

[An alternative option for M-83 is described at the end of this chapter for purposes of Public Hearing.] M-83 will be designed to mitigate its impact on Wildcat Branch and its tributaries. The need for M-83 will be re-examined in the context of the next update to the Germantown Master Plan.

Page 115, bullet 2, paragraph 3:

[This Plan recommends a grade separation of the intersection of MD 355 and M-83 (see Figure 40). This grade separated design will:

- o Eliminate turning movements at this location, which may conflict with traffic using the M-83/I-270 interchange.
- o Encourage through traffic to utilize I-270 and M-83 rather than MD 355.]

Page 116, paragraph 3:

This Plan recommends the construction of Observation Drive Extended (A-19) as a 4-lane divided arterial with a 150-foot right-of-way. This roadway is an extremely important element of the Clarksburg Master Plan for several reasons:

Page 116, last paragraph:

The spacing between A-19 and I-270 along Newcut Road is limited to about 900 feet due to the location of the Comsat satellite groundstation and a branch of Little Seneca Creek. This may result in inadequate weaving distance for [cars turning left onto northbound A-19 from northbound I-270 via Newcut Road. If this is the case, then a signal may be required at the intersection of Newcut Road and the I-270 ramp. Other alternative actions include the construction of a median to prohibit vehicles exiting northbound I-270 from turning left onto A-19, the prohibition of all left turns onto northbound A-19, or designing Newcut Road as a bridge over A-19, with no access from Newcut Road to A-19.] northbound traffic exiting I-270 onto Newcut Road and then turning left onto A-19. Much of the traffic making this movement would be bound for the Comsat property. If weaving distance between A-19 and I-270 along Newcut Road is determined to be inadequate, alternative actions may be necessary as determined by the Maryland State Highway Administration. These alternative actions should provide direct access to the Comsat property while considering the safety and efficient movement of traffic along A-19.

Page 117, delete Figure 41.

Page 118, paragraphs 1 and 2:

[Other solutions to solving this problem include separating the transitway from A-19. This approach would move A-19 further east (approximately 1,500 feet from the future Newcut Road interchange). The transitway would continue through Comsat. This option is shown in Figure 41.

Further study is required to determine which alignment of A-19 is most appropriate.]

Page 118, paragraph 4:

Clarksburg Road (MD 121) traverses the Study Area in an east-west direction. The land use pattern proposed along MD 121 ranges from rural and open space west of I-270 to retail, higher density housing between MD 121 and I-270. The character of MD 121 will change as it serves different levels of development. West of I-270, this Plan recommends that MD 121 be classified as an arterial roadway (A-27, two lanes) rather than a major highway between MD 117 and [A-304]A-302[, which is a new road parallel to I-270 located approximately one-half mile to the west of I-270]. Between A-302 and A-304, this Plan recommends a four lane divided arterial roadway. Between A-304 and I-270, this Plan recommends a six[four]-lane divided arterial roadway. Currently, this section is classified as a major highway. [The low density land use pattern recommended in this Plan west of MD 121 will not require additional road capacity.] This Plan recommends that the portion of MD 121 that is within a one-half mile of I-270 be relocated due to the reconfiguration of the I-270/MD 121 interchange. Due to this reconfiguration, the western section of Clarksburg Road will directly connect with the extension of Stringtown Road, which is also designated as an arterial road (A-260).

Page 118, paragraph 5:

The section of Clarksburg Road between I-270 and A-19 is recommended for [abandonment, except for local property access when the interchange is reconfigured. Although] realignment and will provide for a right-in, right-out intersection at A-260. Gateway Center Drive presently crosses the alignment of Stringtown Road Extended and connects with Clarksburg Road. Gateway Center Drive (A-300) remains in its existing configuration, but the turning movements at its intersection with A-260 (Relocated Clarksburg Road) may need to be restricted because of its proximity to the I-270 interchange. [, this section is also recommended for abandonment when the interchange is reconfigured. This is] These restrictions may be required to reduce the negative traffic impacts of a full movement intersection located at a substandard distance from the MD 121/ I-270 interchange. [This Plan recommends that road construction monies be allocated towards the extension of Stringtown Road rather than to improve the section of Clarksburg Road between I-270 and A-19, which this Plan recommends for eventual abandonment.]

Page 119, add the following to the beginning of paragraph 1:

This Plan recommends that Stringtown Road be constructed as a 4-lane divided arterial roadway between I-270 and A-305.

Page 119, subtitle and the text below:

[FOREMAN BOULEVARD] SHAWNEE LANE (A-301)

[This Plan recommends that Foreman Boulevard be constructed from Gateway Center Drive to M-83 as a four-lane arterial highway. This roadway would provide an essential connection between the Shawnee Lane transit station, employment areas along A-19, residential areas in the Newcut Road Neighborhood, and other areas served by M-83. As Foreman Boulevard travels to the east it crosses through the Montgomery County Public Schools' (MCPS) bus lot, Moyers & Son Moving Company warehouse, and the MCPS Shawnee Lane school site. Clearly, this relocation will not be necessary until both the transitway and M-83 are constructed.

As Foreman Boulevard passes to MD 355, it passes between the neighborhoods on the east side of MD 355 and travels through land recommended for residential development. Either existing Shawnee Lane or Foreman Boulevard will provide access to the recommended local park adjacent to the Little Seneca Creek greenway.

Shown below are two options for Foreman Boulevard between MD 355 and A-19. These options reflect recent information which shows the presence of extensive wetlands on the site.]

This Plan recommends that Shawnee Lane be reconstructed as a 4-lane divided arterial roadway between Gateway Center Drive and MD 355.

Page 119, delete Figure 42.

Page 120, subtitle:

GATEWAY CENTER DRIVE (A-30Q)

Page 120, paragraph 1, last sentence:

This Plan recommends Gateway Center Drive to be classified as a four-lane divided arterial roadway within a variable 80-to 120-foot right-of-way.

Page 120, delete paragraphs 2 and 3:

[This Plan recommends that Gateway Center Drive be realigned to provide an entrance to Gateway I-270 from Observation Drive (A-19) rather than Stringtown Road (A-260) as shown on the Land Use Plan. This alignment should allow for the continuation of safe and efficient traffic operations in the vicinity of the MD 121 interchange.

Although more detailed traffic and engineering studies in the future may allow some type of access off Stringtown Road Extended (such as right turn in and right turn out), the Plan should show the solution which maximizes safe and efficient traffic operations. This approach will also ensure that the right-of-way is not pre-empted by development in years to come.]

Page 120, paragraph 4:

Existing Newcut Road is a two-lane road that connects Piedmont Road to MD 355. This Plan recommends that Newcut Road be relocated adjacent to the stream buffer of Little Seneca Creek and extended to the east to connect with MD 27 and to the west to cross I-270 (with an interchange) and connect with MD 121. (See discussion of Newcut Road Interchange in this chapter.) The Plan also recommends [that the relocated road,] Newcut Road Extended be classified as a four-lane divided arterial highway between MD 121 and [M-83]A-305 and as a [primary street]two-lane arterial from [M-83]A-305 to MD 27.

Page 120, paragraph 5, 1st sentence:

Within the Newcut Road Neighborhood, the character of Newcut Road Extended is intended to be conducive to pedestrian crossings and provide access to the residential and retail areas in the village.

Page 120, paragraph 6, 1st sentence:

The existing intersection of Newcut Road with MD 355 is recommended for abandonment with property access provided from the northeast by Newcut Road [Relocated]Extended.

Page 120, add after paragraph 6:

The Newcut Road Extended crossing of LSC occurs in a highly sensitive area of wetlands. Careful siting of this crossing is necessary for the crossing to assure that the environmental impacts and need for potential mitigation are minimized.

Page 120, paragraph 7:

This Plan recommends a four[two]-lane arterial road parallel to I-270 to serve the Cabin Branch Neighborhood. The location of this road is shown on the approximate location of the ridge line between Cabin Branch and an unnamed tributary of Little Seneca Creek. This roadway serves as a boundary between [two residential areas with different densities]residential and employment areas within the Cabin Branch Neighborhood. In order to provide access to Site 30 and employment uses in the vicinity of the northwest quadrant of the MD 121/I-270 interchange, this Plan recommends the reservation of a 120-foot right-of-way to allow for the construction of a four-lane divided arterial roadway north of MD 121. Given that this alignment crosses through large parcels, this Plan recommends that the specific alignment of the road be developed when these properties develop, whether together or individually. This will allow the road to serve the properties in the most effective manner. Modification of the road alignment is not intended to imply or endorse a change in the actual zoning boundary. Specific recommendations as to the character and location of this road must await final recommendation of the land use pattern.

Page 121, after "Redgrave Place (P-5," paragraph 2), insert after 1st sentence:

The design and construction of sidewalks along Redgrave Place should protect the existing chestnut tree to the maximum extent possible.

Page 121, after paragraph 1:

FOREMAN BOULEVARD (A-306)

This Plan recommends the construction of Foreman Boulevard (A-306) as a two-lane arterial roadway within a 80-foot right-of-way between MD 355 to A-305. This roadway traverses land recommended for residential development and will provide access to the recommended local park adjacent to the Little Seneca Creek Greenway.

Page 121, Subtitle 1:

WEST OLD BALTIMORE ROAD (A-7 AND [P-4] E-1)

Page 121, after subtitle Redgrave Place (P-5):

This Plan recommends that Redgrave Place be classified as a 2-lane business district street within a 70-foot right-of-way to the tributary of Little Seneca Creek. North of that point, this Plan recommends that the roadway be classified as a primary residential street.

Page 121, paragraph 6, 1st sentence:

At the intersection of Redgrave Place with MD 355 (B-1), both roads should maintain a two-lane cross-section without turning lanes and include sidewalks on both sides of the (70-foot right-of-way) street.

Page 122, after paragraph 3, delete the subtitle and the text below it:

[PUBLIC HEARING OPTION FOR MIDCOUNTY HIGHWAY (M-83)]

This Plan proposes that M-83 connect with I-270 south of Comus Road. For purposes of the Public Hearing, an alternative alignment has been examined. This alignment, illustrated in Figure 43, assumes a different character for M-83. First, M-83 would not intersect with I-270 but would instead intersect with MD 355 east of I-270. Second, M-83 would be classified as a two-lane arterial roadway (80-foot right-of-way) rather than a major highway between MD 355 and Clarksburg Road. Between Clarksburg Road and Ridge Road, M-83 would be classified as a four-lane arterial roadway (120-foot right-of-way).

An alternative to the arterial classification could be a two to four-lane parkway designation. This classification would preclude truck traffic on the roadway and would be compatible with the rolling and scenic terrain through which the alignment would traverse.

The transportation analysis indicates that acceptable levels of service within the vicinity of M-83 and MD 355 would be achieved without the M-83/I-270 interchange. The following key points should be noted regarding the roadway network assumptions and traffic patterns in the vicinity of M-83 and MD 355.

- o The two-lane recommendation for MD 355 north of M-83 will serve to constrain the amount of traffic at the M-83/MD 355 intersection, thus limiting adverse traffic conditions at this location.
- o Plan recommended improvements to I-270 (10 travel lanes) and the future transitway are expected to be used by regional through traffic that would otherwise use these roads.
- o During AM peak periods the predominant movement (approximately 75 percent) of peak direction (southbound) MD 355 traffic is estimated to be through the M-83/MD 355 intersection and would distribute itself along roadways located south of this location. The remaining 25 percent of AM peak direction MD 355 traffic is estimated to turn left onto M-83. During PM peak periods this basic traffic pattern should reverse.
- o During PM peak periods peak-direction (northbound) traffic would be constrained by the two lane configuration of MD 355 north of M-83. However, the Plan recommended capacity improvements for I-270 (10 travel lanes), coupled with the transitway extension to Frederick City should compensate for the lack of capacity on this section of MD 355 and also limit through traffic at the M-83/MD 355 intersection. In addition, the Plan recommended upgraded interchange at MD 121 and a new interchange at Newcut Road Extended (A-302) would facilitate I-270 access. Estimates of PM peak hour future demand can be accommodated at acceptable levels of service with this network configuration.
- o Traffic demand on M-83 east of the Town Center during the AM peak hour will be created primarily by development located north and east of Clarksburg along Clarksburg Road, Burnt Hill Road, and Stringtown Road. This traffic will not use the M-83/MD 355 intersection, or the section of M-83 between MD 355 and Clarksburg Road.

The Planning Board remains concerned about the transportation network implication of terminating M-83 at MD 355 rather than I-270. The Planning Board is particularly concerned about unacceptable traffic congestion levels along MD 355 between Clarksburg and Hyattstown if M-83 does not continue to I-270.]

Page 124, add to the end of paragraph 2 after subtitle:

The legislation includes an Interim List of Rustic Roads; this list has been evaluated in the context of the land use and transportation recommendations of this Plan. Table 9 and the accompanying map (see Figure 44) summarize this Plan's recommendations regarding rustic and exceptional rustic roads. A more detailed discussion of the rustic and exceptional rustic road recommendations of this Plan is presented in the Technical Appendix.

Page 126, revise Figure 44 to reflect County Council changes.

Page 127, Table 9, revise as follows:

Roads on the Interim List and Present Designation

7. West Old Baltimore Road	MD 355 to [A-304] [(new road)]MD 121	Remove Designation	Needed for Network
Exceptional Rustic	[A-304 to MD 121] MD 121-Barnesville Road	[Rustic] Exceptional Rustic	[Adjacent land is recommended for rural residential or 2-4 units per acre]

Page 131, revise Figure 45 to reflect Table 7 as amended.

ENVIRONMENTAL PLAN

Page 135, amend "OVERVIEW" section as follows:

Clarksburg is [blessed]endowed with many special environmental features, including a healthy stream [system]network, extensive tree coverage, valuable habitats for flora and fauna, and a varied topography. Little Seneca Lake, a man-made reservoir, is the focal point of [a]the 1,800-acre [park]Black Hill Regional Park.

The various watersheds that are found in Clarksburg are shown in Figure ____.

[The land use pattern for Clarksburg recognizes and supports the conclusions of all the Master Plan environmental studies that the western portion of the Study Area in the Ten Mile Creek watershed has the greatest constraints for development. Existing sampling data, aquatic biota surveys, and field observations indicate that Ten Mile Creek has good water quality that supports a diverse environmental community. The combination of relatively healthy streams, existing wetlands, significant woodlands, and diverse land cover help provide valuable habitats. At the same time, steep slopes and poor soils limit opportunities for development. This Ten Mile Creek area is the most prone of the Study Area to environmental degradation from development. The predominant land use pattern proposed for the Ten Mile Creek watershed (agricultural and rural residential) is supportive of Ten Mile Creek's special environmental character.]

Environmental concerns for the outlying areas of Clarksburg, as well as other planning concerns, have resulted in a low-density land use pattern for Little Bennett Creek (except for a small portion south of A-305 and located within Town Center) and Wildcat Branch watersheds. These watersheds are considered to be most susceptible to adverse development effects, and a low density land use is the most effective strategy for protecting environmental resources from urbanization.

The Cabin Branch watershed, a smaller and less fragile watershed, is designated as a future mixed use neighborhood.

The land use proposals elsewhere in the Study Area reflect a [more] difficult balancing of community development objectives with environmental preservation concerns. The Little Seneca Creek, [Cabin Branch] and Ten Mile Creek, [and Wildcat Branch watersheds] each have valuable natural resources that can be disrupted by urbanization. The Plan intent to foster compact, transit- and pedestrian-oriented neighborhoods and to encourage the creation of a Town Center near the historic district means development will occur in a large portion of the Little Seneca Creek watershed east of I-270. In these areas, the Plan relies on many mitigation strategies to help protect key natural features, including:

- o Proposing a forested conservation area along all streams (identified in Master Plan environmental studies as a critical component of maintaining water quality).
- o Proposing that all the key development areas be subject to more rigorous development review procedures.
- o Proposing that the main[]stems of all the streams be acquired by the public (M-NCPPC) as part of a greenway network and where possible the first and second order tributaries.
- o Proposing extraordinary mitigation for land uses which involve extensive impervious surfaces near sensitive headwater areas.

Environmental studies for the Plan indicate that the Ten Mile Creek watershed has the greatest constraints for development. Existing sampling data, aquatic biota surveys, and field observations indicate that Ten Mile Creek has good water quality that supports a diverse environmental community. The combination of relatively healthy streams, existing wetlands, significant woodlands, and diverse land cover help provide valuable habitats. At the same time, steep slopes and poor soils limit opportunities for development. Of the Little Seneca sub-basins, Ten Mile Creek is the most prone to environmental degradation from development.

As discussed in the Land Use Plan chapter, many different public policy objectives have influenced the land use pattern in the Ten Mile Creek area, including environmental concerns: farmland preservation; the creation of a Town Center near the historic district; maintaining future employment sites along I-270 and addressing the County's housing demand for single family detached units. This Plan seeks to achieve a balance among these different policies. The west side of Ten Mile Creek, designated for farmland preservation, will maintain 64% of the drainage area as low density. Elsewhere in the drainage area, this Plan relies on imperviousness caps, extensive stream buffers and staging to help mitigate the effects of development.

[In keeping with the 1992 Maryland Planning Act, growth has been directed to an existing population center which allows the preservation of large contiguous tracts of open space and fosters the use of mass transit.

Most importantly, this strategy allows development to be channelled away from those areas with the most fragile ecosystems (including Sensitive Areas as defined by the Maryland Planning Act). However, even the areas with relatively few environmental constraints may have pockets of steep slopes and stream valleys which must be protected. This Plan recommends clustering development away from these sensitive features and also proposes that some areas of development address stringent environmental objectives.]

In keeping with the 1992 Maryland Planning Act, most of the planned growth for Clarksburg has been directed to an existing population center which allows the preservation of large contiguous tracts of open space and fosters the use of mass transit. This strategy allows development to be channelled away from Sensitive Areas as defined by the Maryland Planning Act. This Plan recommends clustering development away from these sensitive features and also proposes that some areas of development address stringent environmental objectives.

Page 136, paragraph 1, under subtitle "Watershed Analysis":

The Clarksburg Study Area lies largely within two watersheds: Little Seneca Creek and Little Bennett Creek (see Figure 46).

The Hyattstown Special Study Area is the [only] largest portion of Clarksburg which falls within the Little Bennett Creek watershed. Small portions of the Ten Mile Creek and Town Center Analysis Areas also drain to Little Bennett Creek. Streams in the Little Bennett Creek watershed east of MD 355 are designated by the Maryland Department of the Environment as natural trout waters (Use III-P), demonstrating a capability for the growth and propagation of natural trout populations and their associated food organisms. This designation has more stringent dissolved oxygen, chlorine, and temperature standards than most other waters in the Study Area. Wildcat Branch, at the southeast edge of the Study Area is also designated as Use III-P.

Page 138, paragraph 1:

The Little Seneca Creek watershed in Clarksburg includes three sub-watersheds or sub-basins. In order of size, they are Little Seneca Creek, Ten Mile Creek, and Cabin Branch.

Page 138, bullet 1, paragraphs 1 & 2:

A water resources consultant was retained early in the planning process to evaluate different land use scenarios. [The] One alternative examined development levels which [were examined exceeded] approximated those [being proposed by this Plan] shown in this Plan.

The study concluded, [that] broadly speaking, with few exceptions, state water quality standards for dissolved oxygen and temperature probably could be achieved. [The notable exceptions are stream segments in the vicinity of the Newcut Road Neighborhood.]

Page 138, last paragraph:

[Streams in the] Little Seneca [Lake watershed are] Creek is designated as suitable for recreational trout populations (put-and-take, or periodic stocking and seasonal catching) by the Maryland Department of the Environment (Use IV-P) [and have] with associated standards for temperature and chlorine. Water temperature must remain cool to keep this designation. Ten Mile Creek, Cabin Branch and Little Bennett Creek below MD 355 are designated as Use I-P, which is suitable for general recreation and protection of aquatic life. (See Stream Designation Listing of Montgomery County Streams in the Technical Appendix.) The -P designation indicates that these streams, like many in the County, ultimately drain to a source of the public raw water supply (in this case, the Potomac River).

Page 139, paragraph 1:

A year long field sampling and laboratory assessment of [aquatic life will be] benthic macroinvertebrates was completed in December.

Page 139, paragraph 1, second to last sentence:

The results confirm that the tributaries are functioning as healthy [Use IV-P] cool water streams.

Page 141, change bullet 1:

- o [Protects] Considers the special qualities of Ten Mile Creek Area.

[The Land Use Plan designates the majority of Ten Mile Creek Area for rural open space and agricultural uses. This recommendation will help protect a large enough geographic area to help preserve viable natural communities. When the Ten Mile Creek Area is considered in conjunction with Little Bennett Park and Black Hill Regional Park, the opportunity for providing enough habitat space for a wide variety of animals increases substantially.]

About 64 percent of the Ten Mile Creek watershed is designated for farmland preservation or rural uses. This recommendation supports the environmental objectives which emphasize that low-density land uses patterns and appropriate Best Management Practices (BMPs) as the most effective strategy for maintaining water quality. Elsewhere in the watershed, the land use plan objectives make environmental mitigation the main focus. The following mitigation strategies are recommended in these areas:

1. In the Town Center District, residential densities beyond transit stop walking distances are lowered, and a limit is imposed on employment uses.
2. West of I-270 a 15% imperviousness cap and a square footage cap are placed on employment uses.
3. Extensive green space beyond standard stream buffers is recommended for the area bounded by Ten Mile Creek and Route 121 where substantial development is proposed. This expanded green space, as shown in the Land Use Plan, will become part of the undisturbed stream buffer and should be afforested/reforested by the developers during the subdivision process, if not earlier.
4. Public parkland dedication will be required for the Ten Mile Creek mainstem stream buffers and possibly for buffers for the first and second order tributaries.
5. Public uses on Site 30 are limited to a size and intensity similar to the County jail now under consideration. Site 30 will be subject to the same environmental requirements and constraints as comparable development west of I-270 in Ten Mile Creek, including the employment limits and imperviousness cap mentioned above.

Page 142, bullet 1:

- o Supports a "no net loss of wetlands" policy.

The Master Plan recognizes the critical role of wetlands by recommending a "no net loss" objective and endorsing the preparation of a Nontidal Wetlands [Management Plan (NWMP)]Functional Assessment (NWFA). Montgomery County Planning Department staff and staff of the Nontidal Wetlands Division of the Maryland State Department of Natural Resources are working together to produce an [NWMP]NWFA for Clarksburg. The [NWMP]NWFA will identify the locations of existing wetlands[,] and potential mitigation sites, and assess the functions and values of the wetlands [assess cumulative impacts due to implementation of the Master Plan, and outline a protection plan]. The [NWMP]NWFA will comprehensively consider potential impact areas and possible alternatives throughout Clarksburg prior to the piecemeal regulatory process with an emphasis on preserving the highest quality wetland resources.

Page 142, bullet 2, paragraph 1, last sentence:

Water quality monitoring may also be a requirement for certain developments, as specified in the proposed Water Quality Review Process.

Page 142, bullet 2, paragraph 2:

The type of amendments needed to the ["Guidelines for Environmental Management"] to implement this recommendation are discussed in the Implementation chapter.

Page 142, last sentence:

Headwaters are [a] the principal source of watercourses that can be defined as first and second order streams.

Page 143, first full paragraph:

[This Plan largely avoids the location of impervious surfaces within most of the sensitive headwater areas for Ten Mile Creek and Little Bennett Creek.] Sensitive headwaters [at the top of the watershed are impacted] are affected in Ten Mile Creek by the development of the west side of Town Center and [the Transit Corridor] between I-270 and the Creek as well as a small portion of the Transit Corridor Area. District[s and] Headwaters in Wildcat Branch are affected by M-83 [and the Brink Road Transition Area]. These areas are included in the [recommended] Special Protection Area (SPA) designation (see Implementation Strategies chapter).

Page 145, paragraph 3:

[In general, sensitive areas within watersheds most susceptible to development impacts are targeted for rural land uses to maintain low imperviousness and good water quality without stressing the streams with urbanization effects. This rural density approach and a related increase in agricultural BMPs will be adequate to protect the sensitive water resources in the majority of Ten Mile Creek.] Little Bennett Creek will [also] be [adequately] further protected because of the limited development proposed by this Plan. Due to its moderate land use density, most of the Cabin Branch watershed is expected to maintain existing conditions with use of fully forested stream buffers and appropriate stormwater management.

Page 145, paragraph 4, 1st sentence:

In those areas where substantial development is recommended [(generally east of I-270)] the Plan [supports special development review standards to protect] uses the Special Protection Area designation to buffer the function of sensitive areas from the effects of that development.

Page 145, last paragraph:

Current w[ater] usage in the Clarksburg area is predominantly supplied by individual wells. The aquifer that supplies the water has been designated a Sole Source Aquifer by the U.S. Environmental Protection Agency. As part of the Master Plan analysis, a modeling approach called "DRASTIC" was used to evaluate physical features that affect groundwater conditions. Various parameters such as soil type, slope, depth to the water table and infiltration capabilities were assigned weighted factors to identify where groundwater pollution would most likely occur. The analysis indicated that most of the highly sensitive locations are within the floodplain/buffer areas. The Plan includes [recommends that] areas outside the stream buffer [should be subject to] in the Special Protection Area[s guidelines].

Page 146, Table 11, language under Key Protection Strategy for Ten Mile Creek:

The proposed rural and agricultural land use pattern is the key protection strategy for the area west of Ten Mile Creek, when agricultural BMP usage is anticipated to increase. The east side of Ten Mile Creek with substantial development potential will be protected with a mitigation strategy based on imperviousness caps for employment areas, extensive forested buffers for the chief residential area and development staging that allows advances in environmental protection techniques to be incorporated in Ten Mile Creek properties.

Page 150, paragraph 2:

[In Clarksburg, the area in the vicinity of I-270 and the proposed M-83 interchange is of particular concern. Site design techniques that maximize setbacks, place noise tolerant land uses in the noise affected area, and proper building orientation to mitigate noise, together with acoustical treatments, should be used in this area.]

PUBLIC FACILITIES

Page 151, insert after paragraph 2:

The intent of the Master Plan is to identify general locations for these facilities based on current estimates of future facility needs. The need for public facilities will be re-evaluated at the time of development by the relevant agencies and departments based on actual levels of development yield and County policies regarding those facilities at the time of development. The actual number and type of facilities built may differ from those identified in the Master Plan.

Page 152, paragraph 4:

In addition to providing a trail network, the proposed greenway should also help protect natural communities along the stream valleys. To preserve larger ecosystems (in areas like Ten Mile Creek, for example), thousands of acres would have to be acquired. Although this strategy would maximize conservation opportunities, the financial implications are staggering. [The Master Plan recommendation for low density zoning in the largest of Little Seneca Lake's three sub-watersheds (Ten Mile Creek) should help provide enough open space to help support the survival of natural communities.]

Page 153, revise Figure 50 to reflect County Council changes

Page 154, paragraph 1:

The Ten Mile Creek greenway [will] is recommended to connect the western part of Black Hill Regional Park and the southern part of Little Bennett Regional Park. The greenway [will] is planned to cross over I-270 along Comus Road due to limits on crossing under I-270 with the stream. The greenway [will] is recommended to . . .

Page 154, paragraph 3, sentence 1:

The Little Seneca Creek greenway [will] is recommended to connect . . .

Page 154, paragraph 5, sentence 1:

The Ovid Hazen Wells greenway is recommended to connect[s] the eastern portion . . .

Page 154, paragraph 6, sentence 1:

The Little Bennett Creek greenway is recommended to connect[s] Little Bennett Park . . .

Page 155, paragraph 3:

The proposed park system for Clarksburg includes regional parks, recreational parks, special, and local parks. A description of each park is included in Table 13.

Page 155, after last paragraph, add new subtitle and paragraph:

SPECIAL PARKS

An opportunity exists to obtain a special park through dedication that would provide active and passive recreation opportunities to new residents. In the West Old Baltimore Road area, this park would be adjacent to Black Hill Regional Park, and would have conservation areas in addition to active recreation facilities.

Page 156, table 13:

This table should be revised to clearly indicate which parks and facilities currently exist and which ones are planned for the future.

Page 156, table 13:

Amend table 13 to clarify that Little Bennett Regional Park is not in the Planning Area.

Page 156, Table 13, revise as follows:

Facilities

90 camp sites, hiking, golf course¹, amphitheater, [conference center¹, swim center¹, day use area¹, playground¹, and playfield¹.]

Name of Park

Damascus Recreational³ Park
(277 acres)

<u>Special</u>	<u>Clarksburg Road²</u> <u>(25-100 acres)</u>	<u>Development may include: athletic fields,</u> <u>playground, paved courts, parking, trails,</u> <u>and picnic and conservation areas.</u>
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Notes:

- 1 Under construction
- 2 New park proposed by this Plan
- 3 Adjacent to the Study Area

Page 157, paragraph 3, last sentence:

The Plan does not propose[s] sewer service . . .

Page 157, paragraph 4, sentence 1:

The master plan for Ovid Hazen Wells Parks should be coordinated with this Plan and should consider the need for active and passive recreation areas, including a recreation center and athletic fields.

Page 157, delete paragraph 6 as follows:

[This Plan recommends that the Department of Parks acquire portions of the Board of Education property on Shawnee Lane that may become surplus (See the Public Schools section of this chapter). If this area does not become surplus, then the school fields are recommended to be located adjacent to Clarksburg Local Park.]

Page 158, 1st paragraph under "Recreation Center," sentence 2:

This Plan recommends that the placement of an indoor recreation center be considered at Ovid Hazen Wells Park.

Page 158, 1st and 2nd paragraph under "Public Schools":

Public schools are an essential component of community life and, therefore, must be an integral part of community design and development. The need for new schools is determined by the Board of Education based on both the capacity of existing schools and the projected increase in student enrollment.

It is the objective of this Plan to [provide appropriate] identify general locations for school facilities to meet the general and specialized educational needs of area residents.

Page 159, under "Plan Recommendations," add after 1st sentence:

A new estimate of the number of schools needed will be made by the Board of Education at the time of development for purposes of land dedication.

Page 159, last paragraph:

This Plan recommends that a high school be located on a portion of a 62-acre site owned by the Board of Education at the intersection of Frederick Road (MD 355) and Shawnee Lane. [This Plan also recommends that Shawnee Lane be relocated through this site, which will divide it and provide an opportunity for an additional school. (See the Transportation chapter for more information.) In addition, this Plan recommends that playing fields be located adjacent to the Clarksburg Local Park to supplement the existing facilities. (See the Local Park section of this chapter for details.)] The Board of Education has determined that only 30 acres are buildable and plans are underway to construct a middle school on this site until it can be converted later when needed for a high school. The ultimate development plan for this site should place special emphasis on an attractive frontage along MD 355 since this is a critical entry into Clarksburg.

Page 160, table 14, footnotes #2 and 3:

- 2 Damascus High School [will] is scheduled to gain 18 teaching stations in September 1995.
- 3 Baker Middle School [will] is scheduled to reorganize to [save] serve grades 6-8 in September 1995. In September 1995, a second middle school in the Damascus Cluster [will] is scheduled to open.

Page 160, paragraph 2:

The site for Clarksburg Middle School #2 is [bordered by Ovid Hazen Wells Recreational Park, Skylark Road, and Newcut Road Extended. This site offers the potential for shared parking and ballfields with the park.] on the northwest corner of MD 27 and Skylark Road.

Page 160, last paragraph:

The existing Clarksburg Elementary School is recommended for relocation in the long-term (beyond 20 years) due to its inadequate size and the desirability of having the school better located in terms of future development patterns. The school has recently been modernized and is expected to continue operation at this location for many years to come. [This Plan supports the modernization of the school in the short-term since the school is expected to operate through the normal life cycle of the proposed modernization.]

Page 161, Figure 51:

Amend footnote to indicate that the need for facilities, as well as the final location, will be determined by the relevant agency at a later date.

Page 162, after bullet 4:

This Plan envisions that it may be necessary to reevaluate the need for schools at the time of development and that reduced yields in housing units may reduce the need for school sites.

Page 162, change title in middle of page:

[HUMAN SERVICES] COMMUNITY FACILITIES

Page 163, revise Table 15 as follows:

[Human Services] Community Facilities Recommendations

- | | | |
|----------------------------------|---|---|
| Library | • | Close proximity to other public facilities in the Town Center such as the [senior] <u>community</u> center, and to retail and office areas. |
| [Senior] <u>Community</u> Center | • | Close proximity to other public facilities in the Town Center such as the library and to shopping centers. |
| Fire Station | o | [Relocate Station #9 from Hyattstown to] <u>Consider locating a station in Clarksburg, close to the Town Center (including the possibility of relocating station #9 from Hyattstown).</u> |
| | o | Utilize, if feasible, the site owned by the Hyattstown V.F.D. |
| | o | Maximize access to the Study Area's road network. |
| Police Station | o | [Recommend] <u>If needed, consider</u> an appropriately sized police facility in Clarksburg. |

CLARKSBURG HISTORIC RESOURCES

Page 169, Table 16 under Cedar Grove Historic District, Zoning Plan:

- o Recommends rural [and agricultural] zoning in vicinity of Cedar Grove.

Page 171, subtitles:

Locational Atlas Resources Under Review

[Positive Recommendations] Designated on Master Plan

Page 171, paragraph 1:

The following resources are [recommended by the Planning Board for inclusion] now included on the Master Plan for Historic Preservation:

Page 171, under 13/19 Howes Farm (Elizabeth Waters Farm)
paragraph 2, sentence 1:

The [Planning Board unanimously recommends the] Howes Farm meets the following criteria for Master Plan designation [based on the following criteria]:

Page 171, paragraph 5, sentence 4:

The [Planning Board recommends] environmental setting is the entire 16.75-acre parcel, including the outbuildings and long drive from Ridge Road [as the environmental setting].

Page 172, paragraph 1, sentence 1:

[The Planning Board recommends t]This resource meets the following criteria for Master Plan designation [based on the following criteria]:

Page 172, paragraph 4, sentence 1:

The [Board recommends that the] environmental setting [be] is the entire 5.3-acre parcel, yet it should be recognized that the outbuildings are not significant.

Page 172, under subsection 14/26, paragraph 1, sentence 1:

The [Board recommends t]This resource meets the following criteria for Master Plan designation[, based on the following criteria]:

Page 173, paragraph 2, sentence 3:

Leniency should be exercised in allowing the congregation to relocate stained glass windows from the church if a new sanctuary is built. The [recommended] environmental setting is the 1.46 acre lot on which the church and associated cemetery are located.

Page 173, 1st subtitle and the paragraph that follows:

[NO RECOMMENDATION

For each of the following resources, the Planning Board was split in its decision, with two members voting in favor and two voting against designation.]

Page 173, move entire text under 13/12 to page 176 under Negative Recommendations after 13/11:

Page 174, paragraph 1:

[The Planning Board members opposed to designation found that this resource had neither architectural nor historical significance. The house, which has been altered with artificial siding, has been uninhabited for some time. The bank barn was destroyed by a storm in the late 1970s.]

Page 174, paragraph 2, 1st sentence:

[Other Board members voted in favor of designation, based on] This resource meets the following criteria for Master Plan designation:

Page 174, paragraph 5:

The [recommended] environmental setting is that portion of the parcel (P900) which lies west of Clarksburg Road, being approximately 65 acres. [This resource is located in the Rural Residential Area of the Ten Mile Creek Area.] As there is currently no plumbing in this house, the availability of septic and water on the property needs to be explored.

Page 174, move entire text under 14/25 to page 177 under Negative Recommendations after 13/29:

Page 175, first subtitle:

[NEGATIVE RECOMMENDATIONS] REMOVED FROM LOCATIONAL ATLAS

Page 175, paragraph 4:

The following resources are [recommended by the Planning Board for removal] removed from the Locational Atlas.

Page 175, paragraph 5, 1st sentence under 13/1:

[The Planning Board does not recommend t]This early 20th century dairy farm is not recommended for placement on the Master Plan.

Page 175, paragraph 6, 1st sentence under 13/8:

[The Planning Board does not recommend t]The Burdette Farm is not recommended for placement on the Master Plan.

Page 175, paragraph 7, 1st sentence under 13/9:

[The Planning Board does not recommend t]The Clark Cemetery, whose stones have been removed, but recovered for safekeeping, is not recommended for placement on the Master Plan.

Page 176, paragraph 1, 1st sentence under 13/11:

[The Planning Board unanimously recommends that t]The Lewis Farm, an early 19th century log house with numerous additions, [not be placed] is not recommended for placement on the Master Plan. Although historically connected to Ed Lewis, prominent Clarksburg citizen and co-founder of Boyds, it has had numerous changes and additions over its history.

Page 176, after paragraph 1 add the text from page 173 under 13/12 and correct as below:

13/12 Thomas Jefferson Thompson Farm (Formerly J. Pickens Farm)
23701 Shiloh Church Road

[The Planning Board members recommending against designation found this resource had been too greatly altered to merit designation. In a 1941 fire, the top of the tower was damaged and subsequently removed and the main roof was replaced with slate shingles. Later rear additions have largely obscured the earliest section of the house.

The Board members recommending in favor of designation found this resource met the following criteria: 1A, having value as part of the development of the County, for representing an early multi-use farm; 1C, identified with the Thompson family, prominent in the Clarksburg area; 2A, embodying the distinctive characteristics of a type of construction, with the unusual picturesque arrangement of barns situated between the house and the public road; and 2E, for its landmark setting at the intersection of Comus Road and Shiloh Church Road.]

This farm was owned for 75 years by the Thompsons, one of Clarksburg's early families. (This resource was incorrectly identified on the Locational Atlas as the J. Pickens Farm.) The 1-story rear section of the house was apparently built soon after Nathan Thompson bought the property in 1806. The front section of the house dates from the mid-19th century, when it was owned by Thomas Jefferson and Rosetta Thompson. Newlyweds Henry and Inez Gardiner bought the property in 1890 and updated the house with a Queen Anne-style tower, giving the house a picturesque appearance.

[The farm has a notable collection of outbuildings in fine condition. The bank barn is important to the history of Montgomery County farming for, unlike many other farms in the area, it was not superseded by a modern dairy barn in the 1930s or 1940s.]

[The recommended environmental setting is that portion of the parcel (P333) which lies south of Comus Road and east of Shiloh Church Road, being approximately 40-acres which contains the house, barns, and associated outbuildings.]

Page 176, paragraphs 2 and 3:

13/13 William Thompson House
23511 Shiloh Church Road

This simple three-bay farmhouse has been nearly engulfed by later additions on all four sides which obscure its original building form. It should be removed from the Locational Atlas.

13/18 George W. Hilton Farm
22222 Ridge Road

[The Planning Board does not recommend] This abandoned 20th century dairy farm once owned by State Legislator George W. Hilton, and later owned by the King family is not recommended for designation. The outstanding Queen Anne Style farmhouse was burned to the ground in 1991. It had been abandoned for many years. The 20th century dairy barns are also in deteriorating condition but were once among the finest in the County.

Page 176, paragraph 4, 1st sentence under 13/21:

[The Planning Board does not recommend t]The William Shaw Farm is not recommended for Master Plan designation.

Page 176, paragraph 5 under 13/22:

[The Planning Board found t]This small family cemetery is not worthy of Master Plan designation. Unfenced and with damaged headstones of the William Shaw family from the third quarter of the 19th century, this small burial site was misnamed the Gue Cemetery in the Locational Atlas. It is associated with the William Shaw Farm, but has little significance historically, [or architecturally. Cemeteries are protected by Maryland law, and are rarely placed on the Master Plan.]

Page 177, paragraph 1, last sentence:

The Waters family is already well represented on the Master Plan (Sites #14/43, 19/1). This resource should be removed from the Atlas.

Page 177, paragraph 2, add to the last sentence:

The gable roof is covered with corrugated metal. The log house is no longer extant. This resource should be removed from the Atlas.

Page 177, after paragraph 4, add the text from page 174-175 under 14/25 and correct as below:

14/25 William H. Poole House
24141 Kings Valley Road

[Two Board members found that this resource as undistinguished and has been too altered to merit designation. The house is covered with stucco finish and has additions to the side and rear which alter the original structure.

Two other Board members recommend in favor of designation based on the following criteria: 1A, having interest and value as part of the heritage and cultural characteristics of the County and state, for exhibiting the influence of Pennsylvania German building traditions; 2A, embodying the distinctive characteristics of a method of construction, having been built in two sections with two-door entrances; and 2E, representing an established and familiar visual feature with its prominent location at the intersection of Kings Valley Road and the well-traveled Ridge Road (MD 27).]

This resource is architecturally significant as an example of the Two-Door House, an uncommon building form in Montgomery County, being a house with paired front entrances. This example is particularly noteworthy because it seems to have evolved out of the changing needs of its occupants. Among the Pennsylvania German, as with the Dutch of New York, two-door houses were traditional buildings in cultures which didn't share the English central-hall plan. The doors allowed separate uses, with the house divided in half with one door for everyday-family use leading to an informal living room, and the other reserved for guests leading to a parlor or dining room.

The house was built by 1860 when William and Hannah Poole acquired the 105-acre property from Hannah's father, Allen Miles. In 1887, improvements were made valued at \$450. The Pooles owned the property until 1902.

[Though additions have been constructed on the side (southeast) and rear of the house, they are low and allow legibility of the original building form. The northwest side of the house, which faces Ridge Road, retains much of its original integrity of building form.]

The recommended environmental setting is the entire 0.83-acre parcel (P912). The Poole House is included in this Plan even though it is just outside the Study Area boundary. Located adjacent to the Ridge Road Transition Area, it is not expected to be affected by the widening of MD 27.]

Page 177, the subtitle:

Property [Recommended for Addition] Added to the Locational Atlas

Page 177, paragraph 5, 1st sentence:

The [Planning Board unanimously recommended placement of the] Dowden's Ordinary Site and Marker just south of the Clarksburg Historic District [on] is added to the Locational Atlas.

Page 178, revise Figure 52 to reflect County Council changes.

Page 180, Table 17, #13/12, under the Plan Recommendation column:

[No Recommendation]Negative

Page 181, Table 17, #13/25, under the Plan Recommendation column:

[No Recommendation]Positive

Page 180, Table 17, #14/25, under the Plan Recommendation column:

[No Recommendation]Negative

IMPLEMENTATION STRATEGIES

Page 183 to 192, replace Staging Issues and Recommended Zoning Actions sections as follows:

RECOMMENDED ZONING ACTIONS

This Plan recommends that a comprehensive rezoning action (a "Sectional Map Amendment" or SMA) immediately follow the adoption of this Plan.

The comprehensive rezoning would affect three general categories of property:

1. Properties where the current zoning would simply be confirmed.

These properties would continue in their current zoning category.

2. Properties which are being rezoned to implement the rural and agricultural recommendations of the Plan.

For the most part, these properties are presently zoned R-200 (2 dwelling units per acre) but the Zoning Plan recommends less dense zones (Rural Density Transfer and Rural Residential Zones). [The generalized locations of these properties are shown in Figure 53.]

3. Properties which are being rezoned to higher density.

These properties are quite extensive and include the Town Center District, a portion of the Transit Corridor District, the Cabin Branch Neighborhood and the Newcut Road Neighborhood.

Figure ____ shows the zoning pattern recommended to be implemented by the SMA. The map also identifies properties which will require separate action by County Council (approval of a "floating zone" application) before end-state development can be achieved.

STAGING RECOMMENDATIONS

THE NEED FOR STAGING

The development of Clarksburg will make a significant contribution to the County's long term housing needs, especially in terms of single-family homes. This fact argues for the early development of Clarksburg. At the same time, a significant amount of infrastructure will be needed to implement this Plan, including a new interchange along I-270, new highways, schools, a library, and parks.

A fiscal impact analysis by the Montgomery County Office of Planning Implementation (OPI) examined the capital costs and funding sources associated with these facilities. The key question addressed by the Fiscal Impact Analysis Report was whether the County alone could to afford pay for the capital improvements it would traditionally program using only the taxes from new development.

The report concluded that County revenues would need to be supplemented by developer funding. Developers currently contribute to capital projects in the County in several ways. Some of these include land dedication, in-kind contributions, impact taxes, a systems development charge and funding in the Capital Improvements Program. Additional funding sources that should be considered include the Construction Excise Tax and development districts. Examples of types of other revenue sources that are not currently under consideration but could emerge over the long term implementation of the plan include user fees, other property taxes or gas taxes. Some or all of these revenue sources will be needed in Clarksburg.

This Plan supports staging strategies that are responsive to fiscal concerns and recommends development that is keyed to revenue mechanisms being in place or imminent. This Plan also recognizes that the staging of development is critical if Clarksburg is to coordinate the timing of development with the provision of public facilities, develop a strong community identity, and protect environmentally fragile watersheds.

Finally, it should be noted that the staging recommendations of this Plan are designed to affect the timing of private development and public facilities, not the total amount, type or mix of development. These issues are dealt with in other sections of this Plan.

STAGING PRINCIPLES

This Plan presents seven guiding staging principles related to critical concerns and opportunities in Clarksburg. These staging principles, which are integral components of this Master Plan, provide a general framework and guidance for the future staging or timing of private development and the provision of public facilities in Clarksburg:

PRINCIPLE #1: WASTEWATER TREATMENT AND CONVEYANCE LIMITATIONS

Sewage treatment and conveyance capacity in the Seneca Creek basin is severely constrained and will limit any new development in Clarksburg in the foreseeable future.

The sewerage system in the Seneca Creek drainage basins provides sewer service to areas such as Germantown and some portions of Gaithersburg, and will be extended in the future to provide sewer service to Clarksburg. The sewerage system within the Seneca Creek basin consists of gravity sewers, pumping stations, and force mains. Ultimately, this system converges at the Seneca Wastewater Treatment Plant (WWTP) and the Wastewater Pumping Stations (WWPS) complex on Great Seneca Creek.

The Seneca Creek sewerage system is experiencing capacity problems in two key areas:

Wastewater Conveyance: There are currently several constraints in the sewerage system within the Seneca Creek basin that inhibit getting wastewater flows from their source to the Seneca WWTP/WWPS complex. Several projects to relieve these problems are currently under study or are adopted in the FY 94 WSSC CIP or proposed in the FY 95 WSSC CIP.

Wastewater Treatment: The Seneca WWTP/WWPS complex is currently operating near its capacity.

To meet the County's future wastewater needs in the Seneca Creek basin, additional major wastewater treatment projects are required. Currently, no specific solution to the Seneca Creek wastewater treatment problem has been adopted since it is the subject of the present Seneca/Potomac Study. The most optimistic outlook suggests that if a decision regarding a wastewater treatment solution is reached within the next few months, the projects could be programmed into the 1996 CIP. Any long term solution would have a design and construction period of at least five years, meaning that new capacity will not be available until sometime after the year 2000.

Limited wastewater treatment and conveyance capacity is clearly a constraint to further Clarksburg development until appropriate solutions are programmed into the CIP and constructed. Due to the severe sewage conveyance and treatment constraints in the Seneca Creek basin, this Plan recommends that private development be staged so that no new development should proceed until necessary wastewater conveyance and treatment solutions are fully programmed in the first four years of the CIP, except (1) those which have already received sewer permit authorizations (COMSAT, Gateway 270, and the Damascus Middle School), 2) the Pancar property, and (3) the Town Center area not in the Ten Mile Creek Watershed.

PRINCIPLE #2: FISCAL CONCERNS

The timing and sequence of development in Clarksburg should be responsive to the likelihood that funding for the capital improvements required by new growth in the area will come from a variety of sources, including the County and private development.

The County is expected to program the schools, local roads and other community facilities in the Master Plan using both public and private funding sources. An analysis by the Office of Planning Implementation concluded that if the County had to fund the master planned improvements using only a portion of the taxes from new development, a funding shortfall of \$75 million to \$100 million could result over a 20 year period. In light of this finding, it is clear that staged development should be conditioned on the ability of private developers to fund a significant portion of the infrastructure improvements called for in the plan or the availability of other new sources of revenues.

Under current County fiscal policy, approximately 10 percent of the taxes generated by new development are available for capital projects. Other sources of public funds could include the State and additional contributions from the County. Private sources of funds could include land dedication, developer contributions (in-kind or in-cash), construction excise taxes, development district payments or other development fees.

This Plan recognizes, that while the specific details and implementation mechanisms related to alternative funding mechanisms are not well known at this time, in all likelihood more than one source of private funds will be needed and used in the Clarksburg area. In particular, it is possible that more than one development district could be used. The County should carefully evaluate the use of all alternative financing mechanisms to ensure that they do indeed make significant contributions towards the facilities called for in the Plan.

PRINCIPLE #3: COORDINATION OF LAND DEVELOPMENT AND PUBLIC INFRASTRUCTURE

Land development should be coordinated with the provision of major, capital improvements such as the sewerage system and the transportation network.

Staging policies should be developed to coordinate the timing of land development in Clarksburg with the provision of such public improvements as roads, sewerage facilities, schools, parks, libraries, and police and fire stations. Such capital facilities can best be financed without undue burden to the County and its taxpayers if the facilities are built in a logical, rational fashion, servicing only a few compact development areas at any one time and proceeding in later stages to build out from already developed areas in a logical incremental sequence. By this means, the County can avoid the high tax burden of scattered, piecemeal development which forces wasteful public expenditures for expensive, but underutilized public facilities.

This coordination of land development with the provision of public infrastructure is particularly important given the estimated \$75 million revenue shortfall for Clarksburg. The economies of scale offered by geographic staging will enable the County to make the best possible use of the limited funding available for Clarksburg.

PRINCIPLE #4: DEVELOPMENT OF A STRONG COMMUNITY IDENTITY

The timing and sequence of development should reinforce the Master Plan's community design and identity goals for Clarksburg.

The timing and sequence of development is critical to helping Clarksburg achieve its vision as a transit-and-pedestrian oriented town surrounded by open space. To help promote a strong sense of community identity and design, staging of public facilities and private development should accomplish the following:

- **The Town Center:** Encourage the early development of the Town Center to create a strong sense of community identity and to provide a model for later development in other areas.

An early focus on the development of a vital, mixed use Town Center for Clarksburg can be achieved through the careful staging of both public facilities and private development. For example, this Plan favors initial development east of I-270 where great care has been taken to recommend a land use pattern that fosters a mix of housing, retail uses, employment, community facilities and transit usage. Similarly, this Plan allows the construction of a developer-funded pump station, which would pump over wastewater from the Town Center to an existing sewer trunkline. Such a temporary pump over facility would allow the Town Center to proceed with early development rather than wait for the completion of a stream valley gravity line that will ultimately serve the area. Finally, this Master Plan encourages residential development patterns that best support a strong Town Center identity early on. For instance, residential development in the Newcut Road Neighborhood should be phased to encourage development closest to the Town Center to proceed first.

- **The Transitway:** Assure that areas planned for higher density development near transit are not preempted by less intensive uses.
- **School-Based Neighborhoods:** Recognize that schools are an essential component of community life and integral part of community design and development, and should form the basis for neighborhood units in Clarksburg.

To promote school-based neighborhoods, each stage of development should strive to provide, in conjunction with existing development where possible, an adequate number of dwelling units to support at least one elementary school. Montgomery County Public Schools currently estimates that between 1,800 and 2,200 housing units are needed to support an elementary school. Similarly, the County should have opportunities to obtain school site dedication in each stage of development.

- **Balanced Socio-Economic Mix:** Provide a suitable mix of dwelling units to ensure a balanced socio-economic mix for schools in the areas. Ideally, each stage should strive to achieve a mix similar to the overall master plan mix of units.

Such a variety of housing products in every stage promotes an active, healthy real estate market and provides consumers with a range of housing choices, prices, and living styles.

- **Coordinated Residential and Commercial Development:** Provide for sufficient residential units to support Town Center retail and commercial activities.

This Plan recognizes that retail uses are critical to the vitality of a community, and can play a significant role in reinforcing the Town Center as a central focus for the entire Clarksburg area. Once a sufficient critical mass of housing units are in place to support a retail center (retailers indicate that approximately 3,500 to 4,000 dwelling units are needed to support a retail development that includes a grocery store), this Plan recommends that early retail development priority be given to the Town Center. Retail development in the Newcut Road and Cabin Branch neighborhoods should follow the development of approximately 90,000 square feet of retail uses in the Town Center.

POLICY # 5: MARKET RESPONSIVENESS

Staging should respond to near-term market demand for single family housing and long-term demand for employment.

Staging in Clarksburg should respond, as much as possible, to the growing pressures for more single-family housing in the County. Development should be staged so that a reasonable share of the County's future annual residential growth can be accommodated in Clarksburg over time. Staging should also respond to long-term employment demand that is expected along the I-270 corridor.

POLICY #6: WATER QUALITY PROTECTION

The timing and sequence of development in Clarksburg should respond to the unique environmental qualities of the area and help mitigate, in particular, development impacts to the environmentally sensitive stream valleys in the Ten Mile Creek watershed.

Clarksburg offers a rich array of environmental resources, including Little Seneca Lake, streams with very high water quality, a large number of stream headwaters, extensive tree stands, and an impressive array of flora and fauna, particularly in stream valleys. Staging serves as an essential tool for assisting with the mitigation of development-related impacts in Clarksburg's environmentally fragile, high quality stream valleys.

Significant changes in water quality regulation can be expected during the next few years. A new water quality zoning text amendment was approved by the Planning Board in the Spring of 1994 for transmittal to the County Council. If this new water quality review process is approved, it will be highly desirable to limit early development in Clarksburg to one or two less environmentally sensitive sub-watersheds (such as those found on the east side of I-270) so that DEP can conduct the necessary baseline stream monitoring for the proposed program and test the effectiveness of best management practices in protecting water quality.

Such baseline monitoring and evaluation will better enable the County and Ten Mile Creek property owners to work together in developing effective best management practices for Clarksburg's most environmentally fragile watershed.

Delaying development in the Ten Mile Creek watershed will provide these property owners with the opportunity to pursue voluntary measures to protect water quality in the environmentally fragile Ten-Mile Creek watershed. Such measures might include stream restoration, afforestation/reforestation, and modified agricultural practices.

PRINCIPLE #7: RESPONSIVENESS TO THE SITE LOCATION OF FDA

The federal Food and Drug Administration (FDA) is currently reviewing a number of sites in Clarksburg and other Montgomery County communities that can accommodate the development of 2.5 million gross square feet of office, industrial, laboratory, and related uses.

This Plan recognizes the significant impacts that such a decision would have on Clarksburg and acknowledges that the selection of a Clarksburg site for FDA would require modifications to the recommended land use and to the staging elements contained in this chapter.

THE GEOGRAPHY OF STAGING

The areas affected by this Plan's staging recommendations are shown in Figure ____.

The following areas are not included in the staging plan:

Hyattstown: This community has public health problems, due to failing septic systems which must be corrected immediately. Development in Hyattstown may proceed immediately, subject to the availability of adequate sewerage facilities.

Rural Density Development: Rural density development, zoned for 1 unit per 5 acre densities or less, which may proceed based on the availability of wells and septic facilities.

Public Uses on Site 30: Public uses on Site 30, such as the planned detention center site, are not included in this staging plan.

Previously Approved Development in the Pipeline: Previously approved development will not be addressed by the staging plan. However, any requests for water and sewer plan changes in these areas will be subject to the availability of wastewater treatment and conveyance capacity in the Seneca Creek basin and consistency with the water and sewer service areas delineated in Figure ____.

THE STAGING SEQUENCE FOR PRIVATE DEVELOPMENT

To provide for the orderly and fiscally responsible development of public facilities, promote the development of a strong community identity, and allow for the implementation and evaluation of the County's water quality review process to examine whether best management practices can mitigate the impacts of development on the environmentally fragile Ten-Mile Creek watershed, this Plan recommends that four Master Plan stages guide the sequencing of public facilities and private development in Clarksburg.

Each stage will be initiated or "triggered" once all of the triggers described in the Tables ____ through ____ have been met for that stage. Thus, no stage is dependent on the complete buildout of prior stages. A number of stages do, however, share the same triggers. With the exception of stage 1, all stages require state and county enabling legislation for development districts or that alternative financing mechanisms are in place. Stages 2, 3, and 4 also require the adoption of new Executive water quality review regulations before development may proceed. Stages 3 and 4 are also predicated upon the resolution of wastewater treatment and conveyance problems in the Seneca Creek basin.

After a stage has been triggered, individual developments within that stage can proceed once public agencies and the developer have complied with all of that stage's implementing mechanisms and the traditional regulatory requirements of that property's zoning. Unlike some plans, where staging has been implemented primarily through incremental rezonings of major areas of a plan, this Plan relies on such mechanisms as the County's Comprehensive Water Supply and Sewerage Systems Plan [Ten Year Water and Sewer Plan], the Annual Growth Policy (AGP) and Adequate Public Facilities Ordinance (APFO), floating zone approvals, and the formation of development districts (or other financing mechanisms) to implement the Plan's staging policies. These implementing mechanisms are described in greater detail in later portions of this Plan.

The triggers and implementation mechanisms for Clarksburg's four stages of development are detailed in Tables ____ through _____. Briefly, they can be described as follows:

Stage 1:

This stage applies to those major developments in Clarksburg that have existing sewer authorizations. Specifically, it includes such private office development as COMSAT and Gateway 270, and the new Damascus Middle School. This stage also includes the Pancar property. The properties in this stage may proceed immediately with development subject to existing regulatory review procedures.

Stage 2:

This stage includes those portions of the Town Center District that do not drain into the Ten Mile Creek watershed and that could logically be served by an interim pump station. It includes approximately 1650 residential units and 300,000 square feet of retail uses.

In addition to the triggers described above, it should be noted that this stage may not begin until WSSC and the County Executive indicate that sufficient wastewater treatment and conveyance system capacity exists to accommodate Town Center development and that providing sewer to the Clarksburg Town Center will not stop the Germantown Town Center from developing based on not having available sewer flow when it needs it.

Stage 3:

This stage applies to all portions of Clarksburg located east of I-270 (but not in the Ten Mile Creek watershed) and the Cabin Branch Neighborhood. It includes approximately 8370 housing units and more than 2 million square feet of commercial, industrial, and office development. In addition to the conditions described above, this stage will not be allowed to proceed until wastewater conveyance and treatment problems in the Seneca Creek basin have been resolved and fully programmed into the first four years of the Capital Improvements Plan. In order to promote a strong community identity focused on the Clarksburg Town Center, floating zone approvals in this stage will also be guided by specific community building criteria related to the location of housing and timing of retail development (see Table ____ and the staging policies above).

Stage 4:

This stage applies to development in the Ten-Mile Creek watershed, which is primarily located to the west of I-270 (the headwaters of this watershed are located in the western portion of the Town Center District). This stage includes approximately 1700 dwelling units and 1,270,000 square feet of commercial, office, and industrial development. Due to the environmentally fragile nature of the streams in this area and the Plan's strong emphasis on community building, this stage contains the following additional triggers that must be met before development can proceed in this area. These triggers can be described as follows:

BASELINE MONITORING: Baseline biological assessment of the aquatic ecosystems of the Little Seneca Creek and Ten Mile Creek watersheds, scheduled to be initiated by the Department of Environmental Protection (DEP) in July of 1994, has taken place for a minimum of 3 years. This baseline biological assessment will be used to measure and report changes in the biological integrity of the two watersheds.

COMMUNITY BUILDING: At least 2,000 building permits have been issued for housing units in the Newcut Road and Town Center sub-areas of Clarksburg.

As noted in the staging principles, fostering a strong community identity in the early years of development in Clarksburg is extremely important. For this reason, the Plan favors initial development east of I-270 where great care has been taken to recommend a land use pattern that fosters a mix of housing, retail uses, employment, community facilities and transit usage. To help assure that these concepts are initiated early and to help establish near term priorities for public infrastructure expenditures, this Plan recommends that Stage 4 begin only after development east of I-270 is underway.

Allowing 2000 units to get underway east of I-270 reinforces Clarksburg's town concept by providing sufficient critical mass to support the many public and private facilities that contribute to a community's quality of life and identity. For example, MCPS estimates that 1800 to 2200 housing units are needed to support an elementary school, which is not only one of the more costly public facilities needed, but also an essential component of community life and integral part of community design and development.

EASTSIDE BMPs MONITORED AND EVALUATED: The first Annual Report on the Water Quality Review Process (WQRP) following the release of 2000 building permits in the Newcut Road and Town Center sub-areas is completed by the Department of Environmental Protection. This report will have evaluated the water quality best management practices (BMPs) and other mitigation techniques associated with the Town Center/Newcut Road development and other similar developments in substantially similar watersheds where BMPs have been monitored.

Once the above events occur, County Council will consider water and sewer category changes that would permit the extension of public facilities to the Ten Mile Creek area. As part of their deliberations, the Council will:

- Review the demands on the Capital Improvements Program for necessary infrastructure improvements;
- Evaluate the water quality results associated with Newcut Road and Town Center development and other similar developments in substantially similar watersheds where BMPs have been monitored and evaluated. In undertaking this evaluation, the Council shall draw upon the standards established by Federal, State, and County laws and regulations and determine if the methods, facilities, and practices then being utilized by applicants as part of the water quality review process then in place are sufficient to protect Ten Mile Creek; and
- Assess voluntary measures taken by property owners in the Stage 4 area to protect water quality in the environmentally fragile Ten-Mile Creek watershed. Such measures might include stream restoration, afforestation/reforestation, and modified agricultural practices.

After conducting these assessments, the County Council may:

1. Grant water and sewer category changes, without placing limiting conditions upon property owners;
2. Grant water and sewer category changes, subject to property owner commitments to take additional water quality measures, such as staging of development, to protect the environmentally fragile Ten-Mile Creek watershed;
3. Defer action on a Water and Sewer Plan category change, pending further study or consideration as deemed necessary and appropriate by the Council; or
4. Consider such other land use actions as are deemed necessary.

STAGE 1 (Underway)	
<u>DESCRIPTION:</u> Stage 1 includes those properties in Clarksburg that existing sewer authorizations (COMSAT, Gateway 270, and the Damascus Middle School, and the Pancar property, a grandfathered property with a completed subdivision application prior to initiation of this Plan).	
<u>STAGING TRIGGERS:</u> None. Can proceed with development once necessary building permits and sewer hook-ups have been granted.	
<u>IMPLEMENTING MECHANISM:</u> <ul style="list-style-type: none">• Properties in this stage subject to existing regulatory review processes, including AGP and APFO approval. No additional Master Plan implementation actions needed.	

TABLE ____

STAGE 2
<p>DESCRIPTION: Stage 2 includes those portions of the Town Center District that do not drain into the Ten Mile Creek watershed (see Fig. ____).</p>
<p>STAGING TRIGGERS¹:</p> <ol style="list-style-type: none"> 1) Either (a) State and County enabling legislation for development districts or (b) alternative infrastructure financing mechanisms are in place. 2) County Council adopts a new Water Quality Review Process (WQRP) and DEP issues Executive Regulations related to this process. 3) WSSC and the County Executive indicate that sufficient sewer treatment and conveyance capacity exists or is programmed to accommodate development in this stage and that sewer authorizations for the Germantown Town Center are not put at risk.
<p>IMPLEMENTING MECHANISMS²:</p> <ol style="list-style-type: none"> 1) At the time of Sectional Map Amendment (SMA), the Stage 2 area in the Water and Sewer Plan is amended to S-4, W-4 by the County Council in accordance with the policy recommendations of this Master Plan. The Stage 2 area of the Water and Sewer Plan will automatically advance to S-3, W-3 upon Planning Board approval of a preliminary plan of subdivision for which WSSC and the County Executive indicate that Staging triggers 1, 2, and 3 have been met. 2) Properties in this stage are subject to AGP and APFO approval by the Planning Board. 3) One or more development districts (or alternative financing mechanisms), that can provide public facilities in accordance with the APFO and additional local determinations by the County Council, are implemented.

- 1 All staging triggers must be met to initiate this stage of development.
- 2 Individual developments within this stage can proceed once public agencies and the developer have complied with all of the implementing mechanisms.

TABLE

STAGE 3

DESCRIPTION: Stage 3 includes all portions of Clarksburg that do not drain into the Ten-Mile Creek watershed, i.e., most development east of I-270 and the Cabin Branch Neighborhood. (See figure ____).

Retail/commercial development in the Newcut Road and Cabin Branch Neighborhoods will be deferred, however, until 90,000 square feet of retail uses have been established in Clarksburg's Town Center.

STAGING TRIGGERS¹:

- 1) Either (a) State and County enabling legislation for development districts or (b) alternative infrastructure financing mechanisms are in place.
- 2) County Council adopts a new Water Quality Review Process (WQRP) and DEP issues Executive Regulations related to this process.
- 3) Wastewater treatment and conveyance facilities, sufficient to serve all approved development in Germantown and the Stage 3 area of Clarksburg, are 100% funded in the first 4 years of the CIP.

IMPLEMENTING MECHANISMS²:

- 1) Once all 3 of the above conditions have been met, the Stage 3 area in the Water and Sewer Plan is amended to S-3, W-3 by the County Council in accordance with the policy recommendations of this Master Plan.
- 2) Floating zone and project plan approvals are guided by Master Plan language that recommends that retail/commercial development in the Newcut Road and Cabin Branch Neighborhoods be deferred until 90,000 square feet of retail uses have been established in Clarksburg's Town Center.
- 3) Floating zone approvals are guided by Master Plan language that encourages residential development patterns that best support a strong Town Center identity early in Stage 3. For example, residential development in the Newcut Road Neighborhood should be phased to encourage development closest to the Town Center to proceed first.
- 4) Properties in this stage are subject to AGP and APFO approval by the Planning Board.
- 5) One or more development districts (or alternative financing mechanisms), that can provide infrastructure facilities in accordance with the APFO and additional local determinations by the County Council, are implemented.

- 1 All staging triggers must be met to initiate this stage of development.
- 2 Individual developments within this stage can proceed once public agencies and the developer have complied with all of the implementing mechanisms.

TABLE ____

STAGE 4

(This stage's triggers and implementing mechanisms are described in detail in the Plan's text.
This table summarizes these detailed recommendations.)

DESCRIPTION: This stage allows the remaining areas of Clarksburg (i.e., those properties that drain into the Ten Mile Creek watershed) to proceed with development (see Fig. ____).

STAGING TRIGGERS¹:

- 1-2) Same triggers as for Stage 3.
- 3) Wastewater treatment and conveyance facilities, sufficient to serve all approved development in Germantown and the Stage 4 area of Clarksburg, are 100% funded in the first 4 years of the CIP.
- 4) **BASELINE MONITORING:** Baseline biological assessment of the aquatic ecosystems of the Little Seneca Creek and Ten Mile Creek watersheds has taken place for a minimum of 3 years.
- 5) **COMMUNITY BUILDING:** At least 2,000 building permits have been issued for housing units in the Newcut Road and Town Center sub-areas of Clarksburg.
- 6) **EASTSIDE BMPs MONITORED AND EVALUATED:** The first Annual Report on the Water Quality Review Process following the release of 2000 building permits in the Newcut Road and Town Center sub-areas is completed. This report will have evaluated the water quality best management practices (BMPs) and other mitigation techniques associated with Town Center/Newcut Road development and other similar developments in similar watersheds where BMPs have been monitored.

IMPLEMENTING MECHANISMS²:

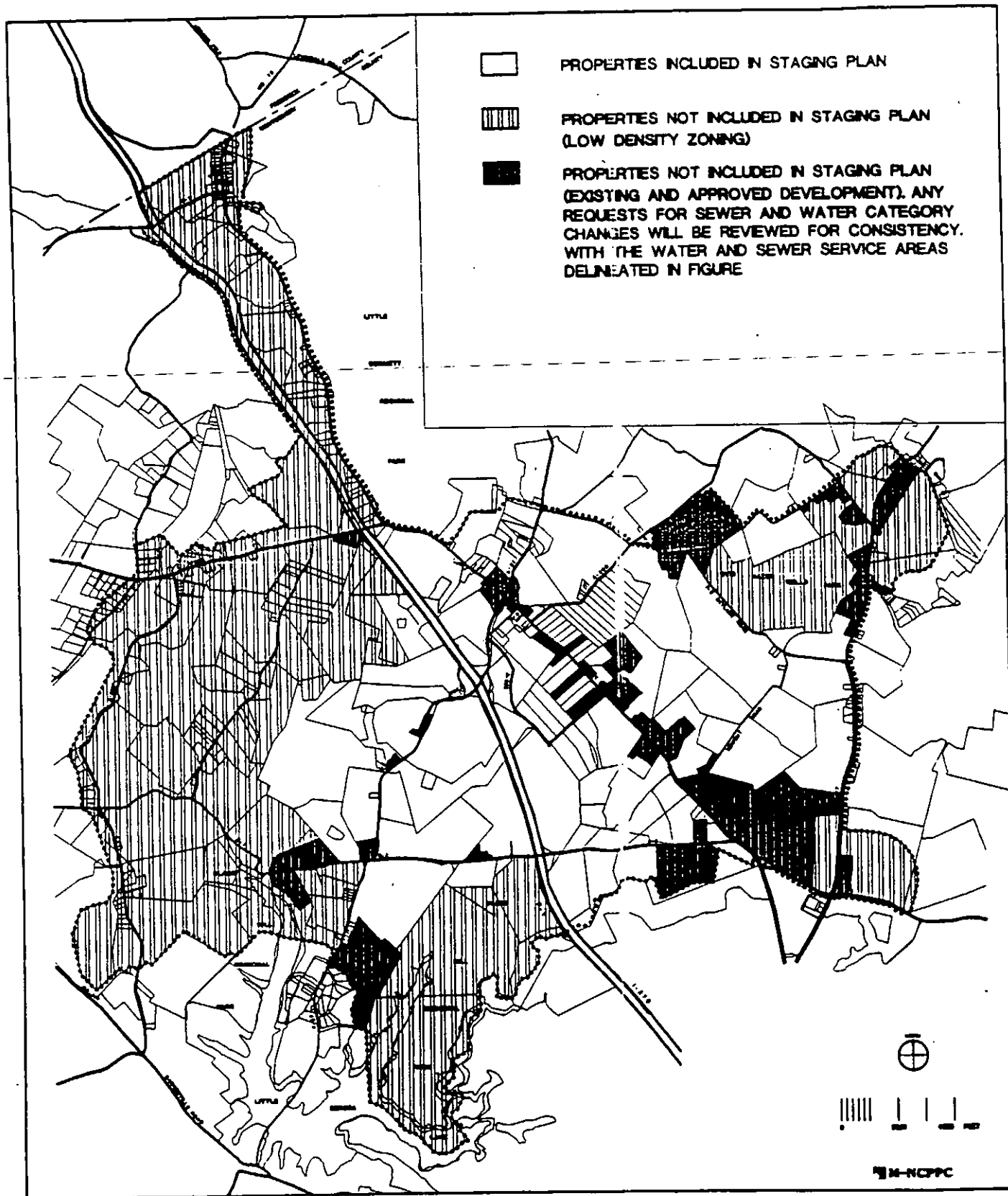
- 1) Once all of the above conditions have been met, the County Council will consider Water and Sewer Plan amendments that would permit the extension of public facilities to the Ten Mile Creek area. (See text for further discussion of these mechanisms.)
- 2) Ongoing water quality and BMP monitoring by DEP in accordance with the WQRP.
- 3) Properties in this stage are subject to AGP and APFO approval by the Planning Board.
- 4) One or several development districts (or alternative financing mechanisms), that can provide infrastructure facilities in accordance with the APFO and additional local determinations by the County Council, are implemented.

1 All staging triggers must be met to initiate this stage of development.

2 Individual developments within this stage can proceed once public agencies and the developer have complied with all of the implementing mechanisms.



THE GEOGRAPHY OF STAGING



CLARKSBURG MASTER PLAN AND HYATTSTOWN SPECIAL STUDY AREA

STAGING IMPLEMENTATION MECHANISMS

COMPREHENSIVE WATER SUPPLY AND SEWERAGE SYSTEMS PLAN

OVERVIEW

The Montgomery County Comprehensive Water Supply and Sewerage Systems Plan (Ten-Year Plan) governs the extension of water and sewer service in the County. The overall goal of this plan is to ensure that the existing and future water supply and sewerage systems needs of the County are:

- Consistent with master plans and the provision of other public services;
- Satisfied in a cost effective manner; and,
- Satisfied in a manner that protects or improves County water resources, from both public health and environmental standpoints.

To provide for the orderly extension of water and sewerage service, State law and regulations have established six category designations for water and sewerage service areas. The formal mechanism for staging water and sewerage service consists of the application of the water and sewerage service categories to various areas of the County. The County Council has the authority to adopt and amend service area designations after consideration of the County Executive's recommendations as well as comments by WSSC and M-NCPPC. Based on this action, service area maps and adopted resolutions are available for use by the general public.

The policies that govern the provision of water and sewerage service under each category are enumerated in detail in the Ten-Year Plan. In addition to policies that are specific to each category, the extension of service must be consistent with the County's comprehensive planning policies. In other words, service should be extended systematically in concert with other public facilities as defined in the General Plan and adopted Master or Sector Plans.

THE WATER AND SEWER PLAN'S ROLE AS A STAGING MECHANISM

This Master Plan recommends that the Comprehensive Water Supply and Sewerage Systems Plan serve as one of the key implementing mechanisms for the staging of private development and the provision of public facilities in Clarksburg. Specifically, the Plan recommends that the following policies govern the programing of water and sewer service in the Clarksburg area:

1. DEP will initiate a comprehensive Water and Sewer Plan amendment that modifies Clarksburg's sewer and water categories in accordance with the recommendations of this Master Plan. It will be undertaken concurrently with the Sectional Map Amendment described above. Such a comprehensive amendment should modify the water and sewer categories for the master plan staging areas as follows:

- a. Properties in Stage 1 should be moved into categories S-1 and W-1.
- b. Properties in Stage 2 should be moved into categories S-4 and W-4.
- c. Properties in Stage 3 should be moved into categories S-5 and W-5.
- d. All other properties in the Planning area, including properties in Stage 4, should be moved into categories S-6 and W-6.

2. Subsequent Water and Sewer Plan amendments be of a comprehensive or area-wide nature only, and consistent with this Master Plan's staging principles and recommendations. These subsequent Water and Sewer Plan amendments should not take place until all of the pre-requisite triggers for each stage of development have been met (see Tables through) and the County Council determines that the category changes are consistent with the policies of the Comprehensive Water Supply Sewerage Systems Plan.

To implement the staging recommendations of this Plan, Figure , "Recommended Sewer and Water Staging for Clarksburg," should be used as guidance for future amendments to the existing Water and Sewer Plan. The water and sewer service sequencing outlined in Figure can be described as follows:

Areas Not Planned for Service

Those areas that will not be served include areas recommended for RDT zoning and rural zoning. In the transition areas near Ten Mile Creek, the sewer service line will be coterminous with the TDR zoning line. These areas will be put in categories W-6 and S-6, with a note that community service is not anticipated.

The Existing and Programmed Service Area

This group includes those areas that can be served now with existing lines plus areas that will be served in the near term when currently programmed projects are completed. This area includes Comsat, Gateway 270, the Damascus Middle School, Hyattstown and the Pancar property. This area is generally consistent with areas given priority for development in Stage 1 of the Staging Plan.

The inclusion of Hyattstown in this category assumes that the Council will program a project for Hyattstown in the FY 95 Capital Improvements Program.

Future Service Area A and A-1

These areas generally include properties on the east side of I-270 in the Little Seneca Creek watershed and a portion of Site 30. These areas match the areas identified in Stages 2 and 3 of the Staging Plan.

From a facility planning perspective and from a funding point of view, the Little Seneca Trunk sewer is the preferred option for serving both the Town Center (Area A1), and the Newcut Road Neighborhood (Area A). The County should make every attempt to program such a gravity line in the FY 96 Capital Improvements Program.

There is a concern, however, that a gravity sewer may not be in place by the time the other Stage 2 triggers for the Town Center are met. To encourage the establishment of Town Center at the earliest feasible date, this Master Plan allows for the construction of a temporary pump station and force main to serve the A-1 area. The service area should be limited to those properties that can logically be sewerred by a pump station that would tie into the existing sewer line.

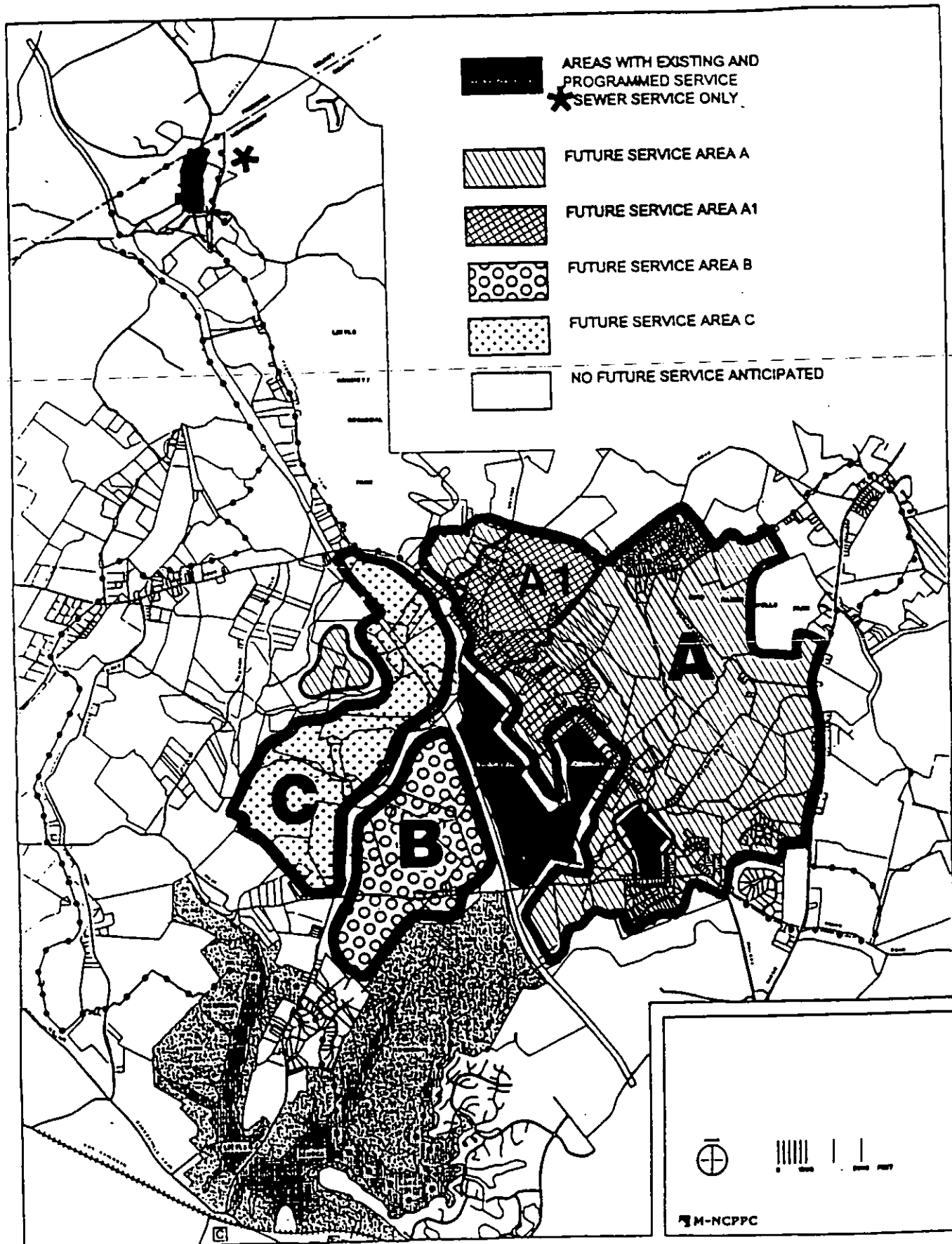
Future Service Area B

This area includes properties in the Cabin Branch watershed. It is comparable to the portion of Stage 3 in the Staging Plan located west of I-270. The major developable properties are the Clarksburg Triangle and the Reid Farm. The employment area along I-270 could be served separately by a gravity sewer line.

Future Service Area C

This area includes those properties in the Ten Mile Creek watershed, including properties on the east side of I-270 on the western edge of the Town Center and the eastern portion of Site 30. This service area is generally consistent with the Stage 4 boundaries shown in the Staging Plan.

CLARKSBURG: WATER AND SEWER SERVICE AREAS



CLARKSBURG MASTER PLAN AND SPECIAL STUDY AREA

FLOATING ZONE APPROVALS

Floating zone designations are recommended by this Master Plan for a number of parcels in the Clarksburg area. In order for such rezoning to take place, the County Council must find that the proposed rezoning for these parcels be compatible with surrounding uses and in accord with the expressed purposes and requirements of the zone. In addition to these traditional requirements, this Master Plan recommends that:

1. Floating zone designations for properties in Stages 2, 3, and 4 not be included as part of the initial, comprehensive rezoning (SMA) described earlier in this chapter. Floating zones should not be approved for these stages until all of the triggers for the stage within which the floating zone is located have been met.
2. Floating zone approvals are guided by Master Plan language that recommends that retail/commercial development in the Newcut Road and Cabin Branch Neighborhoods be deferred until a portion of the retail in Clarksburg's Town Center has been developed.
3. Floating zone approvals are guided by Master Plan language that encourages residential development patterns that best support a strong Town Center identity early in Stage 2. For example, residential development in the Newcut Road Neighborhood should be phased to encourage development closest to the Town Center to proceed first.

THE ADEQUATE PUBLIC FACILITIES ORDINANCE (APFO) AND THE ANNUAL GROWTH POLICY (AGP)

The Adequate Public Facilities Ordinance (APFO) promotes orderly growth by synchronizing development with the availability of public facilities needed to support that development. The Montgomery County Planning Board administers the APFO at the time of subdivision review.

In April of 1986, the County Council enacted legislation which established an Annual Growth Policy (AGP) for the County. Since that time, the Council has used the AGP to match the timing of private development with the availability of public facilities by setting staging ceilings for individual policy areas. The timing aspect of the AGP cannot be over-emphasized. The AGP is designed to affect the staging of development, not the location, total amount, type, or mix of development. Currently, the Clarksburg study area is not covered by AGP staging ceilings because it is not part of a separate policy area.

DEVELOPMENT DISTRICTS OR SIMILAR ALTERNATIVE FINANCING MECHANISMS

Development District enabling legislation was passed by the State legislature in 1994. Separate enabling legislation at the local level is currently under review by the County Council.

A development district can briefly be described as a special taxing district that has the authority to finance public infrastructure improvements needed to support land development by issuing tax-exempt bonds and/or collecting special assessment, special taxes, or tax increments within the district. Property owners would initiate development district formation and make a commitment to finance costs in excess of County expenditures for the infrastructure needed to meet all adequate public facility requirements in the proposed district. The determination of adequate facilities for a development district would be made by the Planning Board and County Council.

According to the enabling legislation currently under review by the County Council, development districts would largely consist of undeveloped or underdeveloped land. Development districts could potentially fund such infrastructure improvements as schools, police and fire stations, sewer and water systems, roads, transit facilities, parks and recreation facilities. They are not intended, however, as a financing mechanism for infrastructure improvements that are considered the responsibility of a single developer under the Planning Board's site plan and adequate facilities requirements.

Development districts are viewed as a valuable tool for providing joint public/private financing of public infrastructure required by new development in largely undeveloped areas.

WATER QUALITY REVIEW PROCESS

A new Water Quality Review Process (WQRP) zoning text amendment was approved by the Planning Board in the spring of 1994 and forwarded to the County Council for adoption. The text amendment relies initially on the use of interim water quality goals, accompanied by a program of iterative and progressive upgrading of design standards for mitigation measures and enhanced provisions for maintenance. It is anticipated that eventually this process will lead to the development of enforceable performance criteria.

To accomplish these goals, the new water quality review process calls for:

- * **Baseline Monitoring:** The Department of Environmental Protection will conduct baseline monitoring of specified high quality watersheds. This monitoring would consist of a biological assessment of the basin's aquatic ecosystems and would allow for the comparison of water quality conditions before and after development.
- * **Goal Setting:** The Department of Environmental Protection will develop interim design goals related to best management practice (BMP) performance and water quality protection, leading ultimately to enforceable performance criteria.
- * **Ongoing Monitoring:** The Department of Environmental Protection will oversee developer-funded monitoring of stormwater management facilities and other BMP's and monitor in-stream water quality associated with development projects.

- * Performance Evaluation: County agencies will provide an ongoing assessment of the ability of different BMP's to protect water quality. These findings will be included in an Annual Report on the Water Quality Review Process to be submitted to the County Council.
- * Improved Design Standards: The Department of Environmental Protection will modify BMP design criteria based on non-achievement of interim goals as verified through BMP and in-stream monitoring.

Based on the results of required monitoring, both the overall and the limits of mitigation in protecting water quality will be clearly defined over time.

Page 193-195, delete Table 19 and Figures 56 and 57.

Page 196, paragraph 2:

This Plan recommends the Environmental Guidelines be amended to afford environmentally sensitive areas like Clarksburg more protection during the development process. The areas shown in Figure 58 as "Special Protection Areas" are based on the environmental analysis done for the Master Plan and guidance from Maryland Department of the Environment and Maryland Department of Natural Resources. "Special Protection Areas" are geographic areas where identified sensitive environmental resources require measures beyond current standards to assure those resources are protected to the greatest extent possible from development activities. The Greenhorne & O'Mara report, Clarksburg Environmental and Water Resources Study, June 30, 1992, identified stream segments where heated runoff from intensive development was predicted to cause moderate to severe thermal impacts to the receiving streams. This study also identified isolated areas outside the stream buffers that have the highest risk of groundwater contamination; those areas occur in the Cabin Branch and Little Seneca Creek watersheds. The intensive developments proposed for the portions [headwaters] of Ten Mile Creek and M-83 in Wildcat Branch are appropriate for use of the SPA development guidelines because of their location [near the top of the watershed and the] in fragile stream [conditions] systems. As shown on Figure 46, this covers the following sub-watersheds:

Page 196, paragraph 4:

Ten Mile Creek -- [Tributaries on east side of mainstem from northern watershed boundary downstream to point of mainstem closest to Shiloh Church Road.] Land draining to any tributary or the mainstream east of Ten Mile Creek and north of West Old Baltimore Road. This includes all tributaries of Ten Mile Creek that drain [to] the Town Center, [and Site 30.]

Page 196, last paragraph:

The Guidelines for Environmental Management should be amended to include these development objectives for the Clarksburg Special Protection Area:

Page 198, subtitle:

[Regional] Stormwater Management

Insert prior to first paragraph:

This plan strongly encourages the use of on-site SWM facilities, with proper maintenance, but allows for flexibility in site-by-site review.

Page 201, paragraph 3, sentence 1:

2. This Plan proposes that the divided arterial which usually has required 100-foot right-of-way be expanded to 100 to 120-foot right-of-way in order to accommodate a Class I Bikeway on one or both sides of the roadway (Stringtown Road, A-301, is one example of this road).

Page 201, delete paragraph 4 as follows:

- [3. This Plan proposes that consideration be given to narrowing the lanes for Frederick Road (A-251) as it traverses the Town Center. Through this area, lower speeds are expected. Pedestrian movement along and across is expected to be heavy. No median should be provided for this section of road.]

Page 201, change number on paragraph 5:

- [4.]3. The Plan proposes that the Section of existing Frederick Road ...

Page 201, paragraph 6:

- [5.]4. A new [local] business street for the Clarksburg Town Center that would have 36 feet of paving with two travel lanes and two parking lanes within a 70-foot right-of-way is proposed. This street would carry a low volume of traffic at low speeds. This type of street would have a high level of pedestrian movement. Street trees are important. (Redgrave Place, [P-5] B-2 is recommended as this type of street.) Parking might be eliminated within the historic district to minimize paving.

Page 201, Delete paragraph 7 as follows:

- [6. Primary and Secondary Residential Dual Road is proposed to be used as a neighborhood street. Currently, the Road Code restricts the use of this street to residential communities. This Plan recommends mixed-use neighborhoods and recommends that this road design be used to serve the variety of uses.]

Page 202, revise Figure 59 to reflect County Council changes.

Page 203, subtitle:

CHANGES TO RMX[-2] ZONES

Page 203, after paragraph 2:

- o Amend the RMX Zones to define and allow carriage houses as an accessory to a dwelling unit on a lot. The text amendment should consider a square foot limit for the size of the carriage house and a percentage limit for the total number of carriage houses as accessory units compared to the total number of dwelling units shown on a project plan.
- o Amend the RMX Zones to allow civic uses and related parking.

Changes to the Agricultural Zones (Rural, Rural Cluster, and Rural Density Transfer Zones)

- o Amend the Rural Density Transfer Zone to grandfather the recorded lots and parcels that will be downzoned to the RDT Zone as a result of the SMA.
- o Create a new "Rural Service Zone" to allow service oriented uses as permitted use rather than as special exceptions. The zone would be a floating zone containing a purpose clause requiring conformance with the master plan and retention of rural character. The development standards would allow limited building coverage and impervious areas. Site Plan review would be required by the Planning Board.

Change to the I-3 Zone

- o Amend the I-3 (Industrial Park Zone) to provide a grandfather clause related to setbacks for an approved preliminary subdivision plan based upon existing industrial zone standards, where it now adjoins master planned industrial zone land that will be changed to a residential recommendation per this Master Plan and where additional road right-of-way is required for Interstate 270.

TECHNICAL APPENDIX

Page 23, subtitle:

[Preliminary] Planning Board Draft Plan

Page 23, paragraph 5:

The [Preliminary] Planning Board (Final) Draft Plan was published in [February 1992] June 1993 and contains land use [options] recommendations for the Clarksburg Master Plan. Public hearings were held by the [Planning Board] County Council in [March and April 1992] September 1993 to solicit comments on the Plan. The [Board] County Council then conducted public worksessions with staff on the Plan. The worksession topics and dates are shown in Table 1. [;some meetings are on film. Inquiries about borrowing the VHS cassettes should be directed to the Montgomery County Planning Board Community Relations Office at (301) 495-4600.]

Page 24, revise Table 1 to reflect County Council changes.

Page 30, paragraph 2:

All residential calculations in this Master Plan include a 22 percent density increase to reflect the MPDU Ordinance provisions[.] where applicable.

Page 30, revise Table 3 to reflect County Council changes.

Page 31, revise Table 5 to reflect County Council changes.

Page 31, last paragraph:

This Plan reduces the amount of employment recommended in the currently adopted 1968 Clarksburg Master Plan by approximately [386] (to be recalculated) acres and [67,300] (to be recalculated) jobs.

Page 32, revise Table 6 to reflect County Council changes.

Page 33, revise Figure 2 to reflect County Council changes.

Page 50, bullet 1:

The findings of the average area-wide level of service analysis are indicated below:

- o This Plan's recommended transportation network can support the recommended land use option (approximately [28,500] (to be recalculated) jobs and [15,400] (to be recalculated) households) based on an average area-wide LOS C/D standard.
- o The land use and transportation recommendations called for in this Plan will not adversely affect the end-state average area-wide LOS C/D standard in the adjacent Germantown Planning Area.

Page 50, bullet 3:

- [o The land use and transportation recommendations called for in this Plan will not adversely affect transportation conditions in the nearby Damascus and Goshen Planning Areas.]

Page 50, paragraph 5:

The end-state trip distribution analysis of resident work trips from Clarksburg shows that the vast majority, approximately 80 percent, of workers residing in the Study Area are estimated to be employed along the Montgomery County/Frederick County I-270 Corridor. As a subset of this percentage, about [15] 21 percent of workers within the Study Area are estimated to both live and work within the Study Area. Another [10] 8 percent are estimated to be employed in the Bethesda-Silver Spring and Washington, D.C.- Northern Virginia areas. The remaining [10] 12 percent of workers living in Clarksburg are estimated to be employed in other locations throughout the region.

Page 50, paragraph 6:

A similar end-state analysis of work trips to the Clarksburg [Planning] Study Area shows that about [80] 75 percent of those persons with work destinations in the Study Area are estimated to have origins from Clarksburg and the nearby areas of Germantown-Gaithersburg, rural Montgomery County, and Frederick County. Another [8] 14 percent of Clarksburg workers are estimated to come from residences in Damascus as well as Carroll and western Howard Counties along MD 27. The remaining [12] 11 percent of Clarksburg workers are estimated to come from other areas of the metropolitan region.

Page 51, revise Figure 10 to reflect County Council changes.

Page 52, revise Figure 11 to reflect County Council changes.

Page 53, paragraph 4:

The amount of through traffic raises concerns regarding the appropriate methodology for accounting for this traffic in the measurement of policy area level of service for the Study Area at end-state, as well as within the context of the AGP. As such, this issue could affect the timing of the implementation of the land use recommendations of this Plan. The Study Area's average area-wide LOS as computed, including I-270, is projected to be in the upper range of C/D. When I-270 traffic volumes are excluded, the average area-wide LOS improves to C.

Page 54, revise Table 8 as follows:

Page 54, add new subsection:

RUSTIC ROAD

OLD HUNDRED ROAD (MD 109)

This section of MD 109 is approximately .61 miles in length, extending from the interchange with I-270 on the west to Frederick Road (MD 355) on the east. West of I-270, this road continues through the Agricultural Reserve to Barnesville and then to Poolesville.

Description: It is a 28-foot-wide paved road with pavement markings and has curbs along the pavement edge. The road is along the side of a hill with the south side sloping down to the adjacent stream. Woods on each side provide an enclosed feel to the road. Utilities are along the south side, as is a guard rail for part of the distance. This road connects I-270 and Frederick Road (MD 355).

Criteria: The road traverses an area where natural features predominate. It is a narrow road in the sense that there is no grading on either side of the road, but the pavement itself is not narrow. This section of roadway is not included in MCDOT's map showing annual average weekday traffic. No volume information is available for the road, but it is evident that the volumes that it carries today do not detract from its rustic character. The road is bordered by woodland, parkland, Hyattstown historic district, and land recommended for rural, residential use. This road is shown on the 1865 Martenet and Bond's Map of Montgomery County as a stage road.

The road had one reported accident in the period 1989 through 1991. There is no indication that it has an accident history that would suggest unsafe conditions. The classification of this road as a rustic road would not impair the function of the roadway network, nor would it impair the safety of the roadway network. The Clarksburg Master Plan supports removal of the I-270 interchange if a new interchange is constructed in Frederick County; MD 109 is not anticipated to be needed for a significant amount of new traffic.

Significant Features: The setting is a significant feature of this road. The road grades contribute to the rustic character of the road. The view is enclosed by trees on both sides for much of its distance.

Rustic Road Network: This road intersects MD 355. North of the intersection, MD 355, through the historic district of Hyattstown, is recommended to be classified as a rustic road. MD 109 to the west is on the County Council's Interim Road list.

Master Plan of Highways Designation:

Rustic R-1

Right-of-way, 80 feet

FREDERICK ROAD (MD 355)

Frederick Road (MD 355) is a very old road with a historic alignment. The road is shown as a stage road on the 1865 Martenet and Bond's map of Montgomery County. Frederick Road is part of the Way West that is commemorated in Montgomery County by the Madonna of the Trail statue in the Bethesda Central Business District. In the lower part of the County, the road is a major transportation artery and has been expanded and has lost any semblance of its original character. The section of roadway between Old Hundred Road (MD 109) and the County line is the heart of the Hyattstown historic district and retains the character of a narrow road with buildings very close to the roadway edge. This road is approximately 0.38 miles long.

Description: This short section of road is paved approximately 22 feet wide with asphalt and has no drainage provisions. The roadway edge is level on both sides, with mature trees. The road has an enclosed feel both because of the trees and because it goes through a historic district with residences very close to the roadway edge. The road has utilities on both sides. It has an asphalt sidewalk on one side and the roadway grade itself is very steep.

Criteria: The road is located in an area where historic features predominate. It is a narrow road. Today it is a State highway and carries traffic between Montgomery County and Frederick County. The Interstate Highway I-270 is immediately to the west of this location and carries most of the interstate traffic. When the connection with I-270 is made at Urbana in Frederick County, we expect that more of the intercounty traffic will use I-270. The Clarksburg Master Plan encourages the use of I-270 instead of this section of MD 355.

The accident history does not suggest unsafe conditions. Two accidents were reported in the three-year period between 1989 and 1991. The 1990 traffic volume map of MCDOT does not show a traffic volume for this portion of Frederick Road. The portion between Comus Road and Old Hundred Road (MD 109) has an average daily traffic volume of 9,200.

Significant Features: The roadway setting, as it goes through the historic district, and the connection between the road and the adjacent houses constitute the significant features of this road.

Rustic Road Network: This road intersects R-1 (Old Hundred Road) and is close to R-6 (Hyattstown Mill Road). All three roads are associated with the Hyattstown historic district.

Master Plan of Highways Designation:

Rustic R-3

Right-of-way, 80 feet

HAWKES ROAD

Hawkes Road is approximately 1.06 miles long, running in a northwest direction from Ridge Road, connecting Ridge Road (MD 27) and Stringtown Road. The road is intersected by Piedmont Road entering from the south at a "T" intersection. That portion of the road between Ridge Road and Piedmont Road is the boundary of the Clarksburg Master Plan Study Area; the remaining portion, between Piedmont Road and Stringtown Road, is within the RDT area of the Functional Master Plan for the Preservation of Agricultural and Open Space in Montgomery County.

Description: The section of Hawkes Road being considered as part of the Clarksburg Master Plan is between Piedmont Road and Ridge Road. The roadway paving is approximately 20 feet, with an asphalt curb on the west side and a slight gravel shoulder on the east. The road crosses a small stream and has a guard rail along the side of the road at the crossing. The roadway edge is level and open with views to Cedar Grove historic district in one direction and to the extension of Hawkes Road in the other. Overhead utilities with wood poles are on both sides of the road. The adjacent land on the west side is a commercial nursery and two new houses. A farm is on the east side.

Criteria: The road is located in an area where natural or agricultural features predominate. The adjacent area is private conservation or is recommended for rural, residential use. It is narrow road and is intended predominantly for local use. The traffic volumes are so low that they have not been recorded and made a part of the County's annual average daily traffic map. Volumes appear to be low enough not to significantly detract from the rustic character of the road. The road has natural features along one side, and farm fields and rural landscape on the other. The road, when traveling towards Ridge Road, highlights the historic landscape of the Cedar Grove historic district. The accident history does not suggest unsafe conditions. One accident was reported for the three-year period 1989-1991. The rustic road classification will not impair the function or safety of the roadway network.

Significant Features: The significant feature of the road is the relationship between the road and the view of Cedar Grove historic district, the character of the land use through which it passes, the small stream that the road crosses, and the rural view to the northwest as Hawkes Road continues over a hill. No outstanding vegetation was identified during the field check, which was done in April 1993.

Rustic Road Network: This road connects the historic district of Cedar Grove and Piedmont Road and continues into the Agricultural Reserve.

Master Plan of Highways Designation:

Rustic R-4

Right-of-way, 70 feet

PIEDMONT ROAD

Description: Piedmont Road is approximately 1.66 miles long and connects Stringtown Road on the west with Hawkes Road on the east. Piedmont Road is an 18-foot wide paved road with grass shoulders. The road has both edge lines and a center line. The one stream crossing is a culvert. Needle Drive and a cul de sac named Remae Court intersect with this roadway on the north side; Skylark Road intersects it on the south side. The adjacent terrain is level and the views are open. Ovid Hazen Wells Park is on the east side. The park land is currently cultivated fields. The road has sharp turns and the appearance of a somewhat modern rural roadway.

Criteria: Piedmont Road has agricultural uses on one side. Those features seem to be the predominate character of the area. It is a narrow road and is intended for predominantly local use. It is a low-volume road (not included on MCDOT's AAWT map) and has outstanding vistas of farm fields and rural landscape for a portion of its length.

During the three-year period of 1989-1991, seven accidents occurred along this section of Piedmont Road. One of these accidents occurred at Hawkes Road; the others occurred at non-intersection locations. The one at the intersection was an early morning accident with no identified cause; the others occurred during the evening and speed was identified as a contributing cause. One of these accidents involved two vehicles; the others were single vehicles running off the edge of the road. Two of the accidents, including the two-vehicle one, had possible injuries; the others were property damage only.

This road is not needed to serve a major increase in transportation. A realignment at Stringtown Road is recommended in the Clarksburg Master Plan in order to create adequate separation between the future intersection of Midcounty Highway (A-305) and Stringtown Road. That realignment should be in keeping with the rustic character of both Stringtown Road and Piedmont Road.

Significant Features: The view of the road as it fits into the adjacent terrain of open fields.

Rustic Roads System: Piedmont Road forms a system of rustic roads when paired with Stringtown Road and Hawkes Road.

Master Plan of Highways Designation:

Rustic Road R-5

Right-of-way, 70 feet

HYATTSTOWN MILL ROAD

Hyattstown Mill road intersects Frederick Road (MD 355) immediately south of Old Hundred Road (MD 109) and extends eastward to Clarksburg Road with the ford through Little Bennett Creek being closed. Approximately .78 mile from MD 355, the road joins Prescott Road. The combined road goes through Little Bennett Creek (the aforementioned ford) before dividing into two individual roads again with Hyattstown Mill Road going southeast and Prescott Road going northeast to Lewisdale Road. Both roads are almost entirely within Little Bennett Regional Park and are therefore exempt from usual roadway standards and development activity. The portion of Hyattstown Mill Road being designated as a rustic road is the public portion — approximately .11 mile between Frederick Road (MD 355) and the park.

Description: This short section of Hyattstown Mill Road is between fifteen and nineteen feet wide with a gravel surface and no provision for drainage. The road passes between an M-NCPPC park playground and a commercial parking lot at its junction with MD 355 and leads into the park, although the road is closed east of Prescott Road in the park. The road leads to Hyattstown Mill, a historic feature at the edge of the park. The land adjacent to the road is level, with mature trees, in particular a walnut tree. As you approach the park, the character of the road becomes enclosed rather than open.

Criteria: The road is located in an area where natural and historic features predominate. It is a narrow road, clearly intended for local use, and an extremely low volume of traffic. The road has natural features along part of its border and provides access to the historic resource of Hyattstown Mill and a route through a portion of Little Bennett Park via Hyattstown Mill Road and Prescott Road returning to MD 355 to the south. This road is the southern boundary of the Hyattstown Historic District. The accident history does not suggest unsafe conditions. One accident was reported for the three-year period 1989-1991. The rustic road classification will not impair the function or safety of the roadway network.

Significant Features: The one-lane character of the road, the gravel surface, the access to the mill house in the park, and adjacent vegetation.

Rustic Road Network: This road is near but does not connect to R-1 (Old Hundred Road) and R-3 (Frederick Road).

Master Plan of Highways Designation:

Exceptional Rustic R-6

Right-of-way, 60 feet

STRINGTOWN ROAD

This section of Stringtown Road is approximately .61 mile in length, extending from the future Midcounty Highway to the planning area boundary. West of Midcounty Highway, Stringtown Road is master planned as an arterial roadway (A-280) to be realigned and connect directly with Clarksburg Road (MD 121) and then with Interstate I-270 at the Clarksburg interchange. To the east, Stringtown Road continues in the Agricultural Reserve to Kings Valley Road. Stringtown Road to the east is included on the County Council Interim List for Rustic Roads.

Description: Stringtown Road is paved, approximately 18 feet wide. It has no curbs and slight gravel shoulders with a drainage ditch along a portion of one side of the road. At the western end of this road, Piedmont Road (also a rustic road) is recommended for realignment, consistent with the rustic road character of these two roads, in order to create adequate intersection spacing between Midcounty Highway and Piedmont Road. This section of Stringtown Road has one other intersection, that of Needle Drive on the south side of the road. Needle Drive is part of the street system for the Fountain View subdivision which lies between Stringtown Road and Piedmont Road.

The road has, particularly on the north side, vistas of farmland, open fields and an old farm house. On the south side is the aforementioned subdivision. The road has views to the north away from Clarksburg.

Criteria: The road traverses an area where natural and agricultural features predominate. It is a narrow road. This section of roadway is not included in MCDOT's map showing annual average weekday traffic; therefore, no volume information is available. The road is bordered by farmland and a small subdivision. This section of Stringtown Road had no reported accidents for the period 1989 through 1991. The classification of this road as a rustic road would not impair the function of the roadway network nor would it impair the safety of the roadway network.

Significant Features: The setting of this road within the terrain is a significant feature, as are the views from the road to the north away from Clarksburg.

Rustic Road Network: This road connects with Piedmont Road, and both Piedmont Road and Stringtown Road (outside the Clarksburg planning area) connect with Hawkes Road. These three roads form a small rustic roads network.

Master Plan of Highway Designation:

Rustic R-7

Right-of-way, 80 feet

WEST OLD BALTIMORE ROAD

West Old Baltimore Road is a historic alignment, having gone originally from the C & O Canal at the Mouth of Monocacy Road to Baltimore. The road extended across Montgomery County. Portions of this road still exist in the eastern part of the County where it is called Old Baltimore Road. This section extends from Frederick Road (MD 355) westward to the boundary of the Clarksburg Master Plan. The rustic road designation has been reviewed in three sections since the travel needs and the character of the road differ for different sections. The section of this roadway between MD 355 to MD 121 is needed for the roadway network and is not recommended as a rustic road. The remaining portion of this road between Clarksburg Road (MD 121) and the western study area boundary meanders through a rural area that is partially wooded and crosses Ten Mile Creek as a ford. This section is recommended as a rustic road as described below.

West Old Baltimore Road in this section is approximately 19 feet wide, paved, with partial curbs in places. The road has extensive vegetation along both sides, very close to the roadway edge. At the same time the road was field inspected, wild roses were blooming along the edge. Farm houses, fences covered with roses, honeysuckle, and wildflowers and wooded areas are along this road. The road goes through Ten Mile Creek as a ford.

Criteria: The road is located in an area where agriculture predominates. It is a narrow road clearly intended for local use and has a very low volume of traffic. The road is an alignment of high historic significance. The accident history does not suggest unsafe traffic conditions. For the three-year period between 1989 and 1991, only three accidents were reported for the entire stretch of road between Clarksburg Road (MD 121) and Barnesville. The road is needed for local access only and not for part of the travel network.

Significant Features: This historic alignment, the grades, the roadway edges, the way this road fits into the terrain, the enclosed feel of the nearby trees and vegetation, and the ford.

Rustic Roads Network: This road connects from the east with R-2 West Old Baltimore Road and crosses Peach Tree Road, which is a road on the Council's interim list for consideration as a rustic road, and ends at Barnesville Road, which is also on the Council's interim list.

Master Plan of Highways Designation:

Exceptional Rustic E-1

Right-of-way, 80 feet

Page 56, paragraph 5:

Under a separate contract, the Environmental and Water Resources Study was required to develop constraints and opportunities maps utilizing parameters such as floodplains, slopes, soils and wetlands. The Planning Department staff used these maps to develop the early land use options. [From the very beginning] As much as possible, the Clarksburg Master Plan effort focused on avoiding development in environmentally sensitive areas and channeling development into those areas that are more environmentally resilient. The composite constraints and opportunities map became the base map for alternative land use considerations. By receiving the Study data in a computerized format, the Planning Department got a head start with its Geographic Information System (GIS) program. The Study also generated a wetlands map, which was combined with the latest data from the Maryland Department of Natural Resources to produce a comprehensive wetlands database for the GIS system.

Page 57, paragraph 4:

EPA has designated a sole source aquifer which underlays parts of Montgomery, Frederick, Howard, and Carroll Counties. A "sole source" designation is used to describe an aquifer that serves as the population's only available form of drinking water. The entire Clarksburg Study Area falls within this designated area. Groundwater analysis was considered an important planning tool to determine what the effects of development would be on the sole source aquifer. Most groundwater modeling is expensive and more detailed than needed for master planning, so this study chose the DRASTIC analysis as a surrogate for groundwater modeling. Using simple techniques developed by the National Water Well Association, it identifies potential groundwater pollution problems. The model indicated that most of the sensitive [groundwater recharge areas] areas to groundwater contamination in Clarksburg were located in stream buffers. The [areas] most sensitive groundwater contamination areas outside of stream buffers were included in the Special Protection Area designated in the Master Plan. Although not every recharge area is identified by this analysis, the DRASTIC model is suitable for master planning purposes. The staff also had numerous discussions on this subject with representatives from EPA, Maryland Geological Survey, and staff at Carroll County.

Page 62, paragraph 2:

Some people believe that spreading moderate intensity development throughout the entire Clarksburg Study Area may be environmentally acceptable. In the Planning Board's judgment, it may have a severe negative impact on Ten Mile Creek but will be tested in the area east of Ten Mile Creek due to housing and employment needs. Ten Mile Creek has low base flow, shallow depth to bed rock and soil, that does not have the capacity to assimilate higher density runoff. It also has an expansive forest cover. By comparison, Little Seneca Creek has a larger base flow and more pervious soil with a greater capacity to absorb runoff. It is envisioned that Little Seneca Creek and the developed portions of Ten Mile Creek will be afforested and will undergo some stream restoration through the Water Quality Review Process to help renaturalize the watershed.

Page 63, revise Table 9 to reflect County Council changes:

Bottomland hardwood forests will be preserved via stream buffers. The most extensive areas of upland hardwood forests are in the Ten Mile Creek area, which [is proposed for] will largely consist of rural, low density zoning to take development pressure off the large contiguous forested areas outside the stream buffer corridors

The Master Plan recommends low density zoning for the west side of Ten Mile Creek [area] to continue the rural land use patterns that so far have preserved healthy stream conditions that support aquatic life. The areas of Ten Mile Creek slated for development are targeted for additional mitigation measures, such as a development limit on industrial sites and expanded green space on the residential portion. All streams will benefit from the stream buffers that will be implemented through the regulatory development

Most groundwater recharge areas are on slopes adjacent to streams, which will be preserved in stream valley buffers, which will be expanded to include the highest risk areas identified by DRASTIC analysis. Recharge areas in [the Town Center vicinity] Little Seneca Creek and Cabin Branch that do not fall in stream buffers will be covered by special development guidelines to be developed later.

Page 64, revise Table 9 to reflect County Council changes:

The Master Plan recommends amending the Environmental Guidelines for Subdivision review to allow more careful environmental review in [sensitive areas like] Special Protection Areas of Clarksburg. [buffers in most of the Study Area.] This includes areas expected to have thermal impacts from development. [The wider buffers may be reduced if other mitigation measures are implemented to lessen thermal impacts. (See Land Use Plan:)] The county's water quality review process, expected to be adopted in 1994, will also assist in assessing effective BMP designs.

Page 69, revise Figure 14 to reflect County Council changes.

Page 70, revise Table 10 to reflect County Council changes.

Page 72, add new sections:

USE DESIGNATION OF TEN MILE CREEK: BACKGROUND MATERIALS

Add the following background materials:

1. Letter from Planning Board to Montgomery County Council dated January 28, 1994 discussing the designation of Ten Mile Creek as a Use I-P rather than Use IV-P. The letter includes the following attachments:
 - Planning Board Staff Response to January 6, 1994 Public Forum on Use Designation;
 - Planning Board Summary of Major Issues Raised at the Public Forum;
 - Background Materials for PHED Committee Worksession #5: Clarksburg Master Plan Land Use Issues in Ten Mile Creek Sub-Drainage Basin (December 3, 1993).

STAGING RECOMMENDATIONS: BACKGROUND MATERIALS

Add the following background materials:

1. Letter dated April 19, 1994 from Planning Board to Chairman, Montgomery County Council Planning, Housing and Economic Development (PHED) Committee explaining Planning Board staging recommendations.
2. Clarksburg Master Plan Staging Options Report, prepared by Montgomery County Planning Department, April 1994.
3. Discussion of Pancar property:

The Pancar property is a 53 acre tract located northwest of the intersection of West Old Baltimore Road and MD 355 in the Brink Road Transition Area. The property was recommended for R-200 zoning in the 1968 Plan and is recommended for R-200/TDR zoning in this Master Plan. There is a completed Preliminary Plan of subdivision that has been pending at the Planning Board, awaiting a sewer category change.

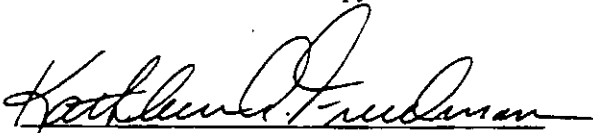
Previous requests for a category change were denied pending preparation of the Master Plan. Because the proposed Preliminary Plan will implement the intent of this Master Plan and in light of the fact that this property has been in the Development Approval Process for some time, it is appropriate to extend service to this property in the near term.

GENERAL

All figures and tables are to be revised where appropriate to reflect County Council changes to the Planning Board (Final) Clarksburg Master Plan and Hyattstown Special Study Area. The text is to be revised as necessary to achieve clarity and consistency, to update factual information (including Council actions on the AGP related to Clarksburg), and to convey the actions of the County Council. All identifying references pertain to the Planning Board (Final) Draft Clarksburg Master Plan and Hyattstown Special Study Area, dated June 1993.

In addition to modifying the Master Plan as noted above, the Council directs Planning Staff to explore options for allowing property owners to proceed through the regulatory process prior to the initiation of their stage of development (as described in the section on staging). A description of each option considered and an analysis of the advantages and disadvantages of each option should be presented to the Council within 6 months of the adoption of this Plan.

This is a correct copy of Council action.



Kathleen A. Freedman, CMC
Secretary of the Council

Acknowledgements

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Community Planning
Community Relations
Design, Zoning & Preservation
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Transportation Planning

**no longer with the Planning Department.*

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Clarksburg Master Plan & Hyattstown Special Study Area

APPROVED & ADOPTED

THE MARYLAND-NATIONAL CAPITAL PARK AND
PLANNING COMMISSION

Montgomery County Department of Park and Planning
8787 Georgia Avenue
Silver Spring, MD 20910-3760



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CLARKSBURG APPEND